THE PROCESS OF
PLANNED CHANGE
IN EDUCATION

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Continue to move.

> *The Vedas*

We must train our minds to think in a new way in this new age
in which we live, the atomic age, the inter-planetary age . . . If we
don't, then the alternative is utter, absolute destruction.

> JAWAHARLAL NEHRU

The Process of Planned Change in Education

WILLIS H. GRIFFIN
and
UDAI PAREEK

Griffin, Willis H. (1919)
Pareek, Udai (1925)

Contents

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Needed; Support from Communication; Planning Provides Leadership; Inter-disciplinary, Interprofessional, and Inter-agency Support; Evaluation and "Feed-back"

Recommendations

Improve Leadership for change; Use and Reform Established Channels and Procedures; Increase and Improve Communication; Plan from the Bottom-up; Involve other Disciplines and Professions; Plan, Implement, Evaluate, Replan

Preface

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DURING recent years many countries have made unprecedented attempts to bring about rapid social change. International cooperation in promoting development has grown to the point where most of the countries of the world are involved. In India, as in many developing countries, the major concern of the government and of leading citizens is to find ways of increasing agricultural productivity, limiting population growth, increasing industrial potential, solving health problems, improving the use of natural resources, and improving educational programmes, to name only some of the problem areas. Development in all of these areas involves changes in people—changes in their values, attitudes, customs and practices, work habits and methods, and ways of thinking. In a very direct way the success of efforts to bring about rapid economic and social development is dependent on a significant degree of change in outlook and behaviour among people at all levels of Indian society.

Because current planned efforts towards rapid and massive economic and social development are unprecedented in the history of man, very little has been known until recently about how to accomplish it successfully. This may be more true in those areas requiring change in cultural values and social processes than in those areas requiring the conquest of nature or economic growth. Perhaps in the field of education the problem is most complex because education deals centrally with areas of value, understanding, tradition and habit in which changes are slow to emerge and difficult to demonstrate.

Out of the intense search for ways of making development programmes more effective has come a considerable amount of

experimentation and innovation. Some of the new approaches have been successful and many have failed to achieve their objectives; generally, plans and projects for development have fallen short of expectations in both quality and speed of results. One of the reasons may be that expectations have been unrealistic and fall short of achievement; another is that the approach and methods often have been faulty.

Fortunately, scholars representing a variety of academic disciplines and many countries recently have been studying programmes for development to find out what factors tend to improve chances of success and which tend to inhibit success. Some of these scholars, particularly cultural anthropologists, sociologists and social psychologists, have focused their attention on those factors which seem most important in programmes requiring change in values and behaviour in people. Reports of these studies are increasingly finding their way into print. Development planners now have available a considerable library of resources to draw on for ideas on how projects for development and change may be better planned and carried out.

However, few studies have been made of the process of change within educational systems and institutions. Nor have many authors attempted to apply the results of research and experience in other fields to the field of education, much less to education in India. It is for this purpose that the present volume has been prepared.

The book has not been written in haste, in fact, it has grown and evolved over the past six years. The authors met for the first time at Teachers College, Columbia University, in New York. Udai Pareek went there as the first participant under the Teachers College—U.S. Technical Cooperation Mission project of assistance to the Ministry of Education, Government of India. His areas of study in the United States included group dynamics, educational research and evaluation. W. H. Griffin was then the Campus Coordinator of Teachers College projects in Asia. They early discovered a common concern for the problems of cultural change in developing countries. Pareek's concern developed from his experience in promoting change in his home country. Griffin became vitally interested in the relationship between culture and development during a four-year tour as educational advisor in Afghanistan.

In the year following his contacts with Pareek in the U.S., Griffin came to India as a member of the Teachers College project to work with the extension programmes of the National Council of Educational Research and Training. By this time Udai Pareek had left the Council and joined the Indian Agricultural Research Institute. However, their common interest drew them together for work on several educational projects. One such project was a 2-week training course for Coordinators of Extension Services Departments of training colleges, held in Mysore. While working together in the training programme, they developed a list of generalisations on change and presented it to the group for discussion. The reaction was encouraging. They also collected a number of critical incidents from the experience of coordinators (both in the Mysore training course, and in a later course held in Patiala) which illustrate both the success and failure of attempts to introduce specific innovations.

The authors prepared a draft paper incorporating important generalisations about change from various studies and from their own experience, and circulated it among several educationists. The comments were fruitful. The authors, therefore, were encouraged to expand the paper, and it was then that the idea of preparing a monograph on the subject was first conceived by them. The generalisations were published in the form of a short article in the *Indian Management*, and it won the Bharatram Charatram prize for the year (1963).

. The authors then developed additional material, both based on their experiences and from incidents narrated or given in writing by a number of people. Discussions with educators encouraged the authors to expand their efforts into a book, and the encouragement was intoxicating.

Both the authors have worked in the field of education in different capacities. W. H. Griffin, besides holding a professorship at Teachers College, Columbia University, worked for six years with the Citizenship Education Project which was mainly concerned with change in the teaching of citizenship. In addition to the experience as an educational advisor in Afghanistan he spent a sabbatical leave in the Middle East where he made a study of changing Islamic culture and the implications for educational planning. His work during three years in India gave him unique opportunity of observing extension programmes in a developing

country from close quarters, and working intimately with Indian colleagues to improve them. Since his return to the United States in 1965 he has been in charge of the international programmes of the University of Kentucky and a member of the staff of the University's Center for Developmental Change, a rather unique agency charged with the task of helping all units of the University of Kentucky to increase their involvement in studies and projects concerned with social change.

Udai Pareek has had considerable experience in the field of education, in teacher training programmes, and in planning educational development and research projects in basic education. For a year in Italy he studied the area of cross-cultural personality patterns. He has had varied experience with programmes designed to promote change and development—in the fields of health, agriculture and small industry as well as education. In these fields his main role has been the study, planning and evaluation of change in people through training, and change in the field through change in people. He has both conducted and guided research in adoption and diffusion of change. He was exposed to new research findings and new ways of bringing about change in people during his short study tour in the United States of America. He is the first and the only Fellow from Asia of the National Training Laboratories (now the NTL Institute for Applied Behavioral Science), Washington, D. C., U.S.A. He has worked as a laboratory (human relations) trainer in India, U.A.R. and the U.S.A. He has taught social psychology and worked with the Population Center of the University of North Carolina at Chapel Hill in developing psychological researches in fertility behaviour and training strategies. He is currently Director, School of Basic Sciences and Humanities in the University of Udaipur.

The authors, with their varied background and common concern, were convinced that the time is overdue for educational workers to see their task in terms of the human and social problems of cultural renewal. Serious efforts are being made to bring about and consolidate improvements in Indian education. One such significant effort was the creation of the Department of Extension Programmes for Secondary Education in 1955. Unfortunately that department has been abolished in NCERT. The authors feel that such agencies should be set up and these could

be greatly strengthened if their work were thoroughly reoriented in terms of the best that is known about the process of change: It is hoped that the ideas of this book may make a contribution in this direction.

The present volume focuses on those factors which make far more sensitive and scientific planning of change in education. This will result, the authors feel, if the various findings of behavioural and social scientists are more fully utilised. This is the central theme of this volume. *It is addressed to educationists and educational workers in Indian education with a view to stimulating their interest and attention to this area. It is also addressed to a growing number of students who will be workers in Indian education and should be acquainted with the problems of educational development. It is the hope of the authors that the readers will bring to bear their understanding and appreciation of problems and, more than that, their experience, on the discussions presented in this book.*

The authors would like to acknowledge their gratitude to a large number of extension coordinators who helped in discussing the basic ideas presented here, and who provided several stimulating incidents of success and failure of changes in education. They would like to acknowledge the help of many educationists and social scientists who gave their reactions and suggestions to ideas presented in papers and lectures. Most of all, they acknowledge the help they received from the publications of the many scholars who have studied and written about social and cultural change. They have borrowed ideas liberally from the publications listed in the bibliography.

Griffin would particularly like to thank DEPSE, its able, dedicated, hard-working and long-suffering staff, and the TCCU Team in India for their cooperation and encouragement. Included in this category are: Dr. N. B. Buch, Mr. K. P. Surendranath, Dr. R. H. Dave, Dr. G. N. Kaul, Dr. D. S. Nigam, Dr. Raof, Dr. Harry Webster, Dr. Albert Perrelli, Dr. Rex Bell and Dr. Walker Hill. Special gratitude is due to Dr. J. Paul Leonard, TCCU Team Chief, and Dr. A. C. Devegowda, Director of DEPSE, who helpfully criticized an early version of part of the manuscript. Special thanks are also due to Shri J. P. Naik, Adviser on Primary Education, Ministry of Education, and Member-Secretary of the Education Commission, for his stimulating encourage-

ment. He would also like to mention Dr. T. B. Naik, Professor of Anthropology, Ravishanker University (formerly Director, Tribal Research and Training Institute, Chhindwara), who was the first person to suggest to Griffin the need to apply ideas from research on change to the planning and promoting of the reconstruction of Indian education.

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W. H. GRIFFIN
UDAI PAREEK

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Introduction:
The Concept of Planned Change

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In any living culture, you will always find a perpetual process of renewal. What happens to be heresy today becomes heritage tomorrow. What is adventure for us today, becomes legacy tomorrow. In other words, if a culture is to perpetuate itself, it is reaffirming its fundamentals and trying to readjust them to the requirements of each generation. If we lose this quality of self-renewal, the culture itself becomes decadent.

—SARVAPALLI RADHAKRISHNAN

EDUCATION AND CHANGE

EDUCATORS have a dual role to play in any society, particularly in a developing society intent on rapid social change. In the first place they must be concerned about the contribution of education to development goals. This includes the analysis of social problems, and rethinking the basic values and structure of society. It includes the study of the critical issues involved in the character and direction of development. It includes the education and training of young people with the understanding, attitudes, critical abilities and skills required to make the most appropriate contribution to the rapid development of the country.

The second role of educators is related to the first. They must put their own house in order. They must introduce the kinds of innovations that will transform educational institutions into dynamic, creative, self-reforming organizations capable of responding to the development needs of the country and the best that is known about effective education. They must re-examine, methods of planning, procedures for introducing reforms, personnel

policies, systems of reward and recognition, methods of decision-making, the relationship of education to basic culture and the means for relating educational programmes to the changing goals of India.

This second role is the concern of this book. We will not outline what the structure or content of Indian education should be, although what we will say has implications for both. We will suggest approaches to the promotion of change in education which should lead to better implementation of proposals that have been made for decades, and others. We are concerned primarily with the process of change and how it can be more effectively promoted. What is needed most is not another set of recommendations on what Indian education should be. What is needed more are recommendations on how to speed up changes which most educators agree should be brought about.

Unfortunately education is often slower to change than other aspects of developing societies. This may be due in part to the low priority often given to education by development planners. It may be due in part to the fact that educational traditions are more deeply rooted and less readily responsive to some of the more immediate forces for change, such as economic reward. It may also be that educational planners have been slower to make use of what is known about the dynamics of change. They may also have been slow in using the results of experience with development projects in other areas such as community development and agricultural production.

Fortunately, in recent years a considerable body of knowledge has accumulated, as a result of the researches of behavioural and social scientists and experience with change programmes, which reveals a certain degree of consensus on what is involved in the successful promotion of change. Much of this knowledge has greater relevance for development within education than is generally recognized. It is the purpose of this book to suggest how the central ideas from this knowledge can be applied to planning and implementing programmes for the improvement of education in India.

years from the early studies of anthropologists, social psychologists and sociologists. These ideas were neglected until recent years in the planning of large-scale development projects in developing countries, and in the technical assistance programmes initiated by the more advanced countries. The evidences of this neglect are many. Facile optimism and unrealistic expectations all too often have dominated the thinking of development planners. Development has been conceived for the most part as an economic and technological problem, and too little has been done to accommodate the many human and cultural factors. Many attempts have been made to transplant in wholesale fashion the techniques, institutions and values of industrialized societies, without adequate adjustment to the cultures of the societies in which the borrowed ideas and practices were to take root. Rapid development in the newly independent nations of Asia and Africa became the pawn of international political forces, and of nationalism, and huge cooperative projects were often initiated without the careful planning and patience required for success.

Hopefully, during recent years, we may have witnessed a beginning shift in the planning of development programmes. There is evidence of a growing recognition that socio-economic planning in underdeveloped societies is not a simple process which can easily accomplish in a few years what has taken generations in industrial societies. Disillusionment with the success of transplanting institutions and practices from other countries is leading to more emphasis on careful study of the developing society and stimulation of indigenous creativity. To some extent the base of planning is being broadened to recognize human and cultural as well as economic and technological factors. The behavioural and social scientists, somewhat isolated from earlier planning, are now increasingly involved in studying the process and problems of social change, and to some degree they are being listened to by the planners of development projects and international cooperation. The results of research and thoughtful experience are increasingly coming into print, and these results seem to be clarifying many aspects of the process not adequately recognized in the past.

However, all the problems are not yet solved. Many aspects of development have not yet been illuminated to a significant degree. The problem of human motivation looms large in this

list. The role of traditions in inhibiting or encouraging change is another. The question of priorities where resources are limited continues to be a knotty problem. Vested interests and political considerations increasingly complicate implementation of plans. In addition to the lack of knowledge on these and other continuing problems, there is also the problem of making full use of what is known. In spite of increasing sophistication as to the process of planned development, all too often what has been learned seems to be ignored or inadequately applied. New projects are still launched by central governments without keying them on the felt-needs of people or taking into account predictable reaction from the provincial and local levels. Attempts are still made to influence behaviour in one aspect of life without taking into account the ways in which each aspect of living is interlinked with others. New attempts are still made to transplant programmes from one culture to another without recognizing the vast differences that exist between the cultures in experience, values, social structure and problems. New programmes are still planned by development agencies without involvement of the creative urges of leaders close to the level of implementation.

As indicated above, the field of education may be among the slowest in many countries to recognize the potential contribution to its own problems of scholarly studies on the change process. Certainly this is true in India where sociologists, cultural anthropologists and social psychologists, Indian and foreign, have been deeply involved in such fields as community, agriculture and small industry development, but similar participation in the planning and implementing of projects in education has been small, if not entirely lacking.

FOCUS OF THIS BOOK

The purpose of this book is to interpret those generalizations which research and experience point up which seem to apply to the promotion of improved educational institutions, programmes and practices. In retrospect, which is always clearer than foresight, it is easy to identify unsuccessful attempts to promote innovation which seem to have failed because certain principles of change were neglected. Some of these will be identified throughout the book. Certainly there are major blocks to change in edu-

cation which may be responsive to careful application of ideas derived from research on change. Suggestions will be made of possible ways of overcoming these blocks. Furthermore, particular attention will be given to the ways in which leadership personnel at all levels may discharge their duties to assure promise of more successful results.

Using the terminology of the scholars of the process of change, we shall refer to personnel responsible for promoting innovation as *agents of change* or *change agents*. In the Indian context, agents of change in education may include such persons as the staff of the National Institute of Education, planners in the Central Ministry and State Departments of Education, the staff of the State Institutes of Education, extension workers, teacher trainers, inspectors and supervisors, block education officers, headmasters, and leaders of private education societies. Teachers also are agents of change for they often teach in school or college what is not taught at home. Although the experience of the authors in working with universities is small, the ideas discussed herein may have considerable relevance also for vice-chancellors, members of university syndicates, heads of departments, principals of colleges, and others in a position to influence the speed and nature of improvement in university programmes. All such potential leaders of change and development in Indian education are the audience for whom this book is intended.

We shall also refer from time to time to "clients" of the agent of change or of change programmes. This term, although not a completely satisfactory one, means those persons or groups with whom the agent of change works, whom he tries to influence and help. Farmers are the clients of the agricultural extension programme. Industrial managers are the clients of industrial extension workers. Teachers are the clients of coordinators of extension centres. Obviously a person who is a client in one situation may be an agent of change in another and vice versa. In some situations, headmasters may play the role of agent of change with their teachers as clients. In other situations, headmasters may be the clients of improvement programmes launched by state or district education officers.

We are concerned with change in education as part of the larger process of social and cultural development. Indian development schemes and programmes represent planned attempts to

bring about change in a particular direction, and the many projects sponsored by central and state agencies for the improvement of education are a part of the overall effort to bring about planned growth.

WHAT IS PLANNED CHANGE?

As indicated above, to a limited extent we will make use of terminology from the social scientists. This may help in gaining a refreshing perspective on the problems of improving education. In addition to the terms "agent of change" and "client", we will talk about social change, cultural change, change programmes, readiness for change, innovation, dynamics of change, and planned change. What do these terms mean? Do they connote new ideas and concepts, or are they old ideas in new dress?

The ideas intended by these terms are both old and new. They are old because change has always been a characteristic of human affairs, and there have always existed leaders of change and processes through which change occurred. They are new because the idea of planned change is of more recent origin, particularly in the extent to which it is being attempted during the past several decades in many countries of the world.

Change is not new and no student of history should fear it. It has always been present in human affairs and it will undoubtedly continue to be the same. The discovery of fire brought about change in the life of early man. The invention of the wheel improved man's control over nature and brought tribes into closer contact with each other. Rivers changed their course after floods and the life of villages dependent on them was altered. Missionary religions have spread to a new people with resulting changes in ways of thinking and worshiping. Village wells have gone dry and those families dependent on them have shifted to other wells, thus altering social relationships. Powerful nations or peoples have invaded and conquered other nations resulting in a mixture of cultures and changes in values and ways of living. Sources of food have been exhausted and new foods have been found and accepted. Strong leaders have emerged among a people to exercise a dominant influence over the lives of their followers, and allegiances, patterns of behaviour and ideas have been moulded in a uniform direction.

Numerous *illustrations* of change may be cited throughout history. In some cases significant change has resulted from changes in the natural environment. In other cases, change occurred when groups of people faced a problem and were forced by circumstances to find a solution to it. In many cases change has resulted from contacts between peoples of differing cultures. In still other cases change has resulted from the influence of a charismatic leader who had a clear vision of the future and the ability to convince a majority of people that they should change their way of living and thinking.

Planned, directed, peaceful change may appear to be new in recent times; it is not. Many illustrations could be cited from earlier history. Three such cases should be familiar to students of Asian history. Akbar attempted, with some success, to change traditional administrative procedures in governing the *peoples* of India. He also attempted to bring about a synthesis of the religions of the various cultural groups in his domain; with less success. Another example is that of Mustafa Kemal Attaturk of Turkey who tried to turn his country away from Arabic culture and towards Western European culture. Among other things he reduced the power of Muslim imams, introduced the Roman script and patterned government administration and law on European models. Although it can be debated as to how profoundly Attaturk's reforms affected the basic culture of Turkey, his efforts are an example of planned, directed, social change.

Another example is that of Amanullah Khan of Afghanistan. Inspired by his visit to Europe, and the example of Attaturk, he attempted in the third decade of the twentieth century to modernize Afghanistan by fiat. He curtailed the influence of the powerful Muslim mullas, introduced compulsory education, made Western dress mandatory on the streets of Kabul, and outlawed purdah. His attempt was destined to be of short duration and he was forced into exile in 1929 by the conservative forces he had, not succeeded in suppressing or convincing. Perhaps all three of these reformers would have been more successful if what is known today about changing human beings had been available to them, and if they had had a greater understanding of and tendency to use the methods of the agent of change.

An example of a current planned change, which has had widespread influence in the world, is that initiated by Lenin in the

Soviet Union in the early part of the twentieth century.

Planned social and cultural change differs from most change that has taken place throughout history. In spite of the above examples, change has occurred for the most part in an evolutionary fashion, each innovation leading to others in a never-ending sequence of cause and effect. Except in the case of wars of conquest, most events occurred without a conscious effort on the part of man to influence them. In many cases they were caused by forces outside his control. He responded to changes he did not anticipate or plan. In recent history, however, the situation has been altered to a significant degree. Advances in scientific knowledge and technology have made man less dependent on unforeseen events. Increased sophistication in the management of human affairs has made possible the solution of many social problems which have perplexed man through the ages. Changes in the political make-up of the world have made more possible independent decisions by nations as to their future. The conscience of the world has been awakened, releasing strong motivation within and outside the backward nations to strive for a higher standard of living and a more humane and peaceful existence for all of mankind. Consequently, planned social change has come to characterize the present-day world.

Planned change is the organized effort of the leadership of a country to bring about improvement in one or more aspects of their society. It involves the careful management of resources and effort to bring about change of a particular nature, moving in a particular direction. It includes thoughtful consideration of the steps required to bring about the desired improvements, the techniques and methods to be used to accomplish each step, and the decisions to be made to provide the needed resources and to channel effort in support of the required steps. Of central importance to planned change is the purpose, goal or direction to which the organized efforts for development are intended to contribute. This means that the planners and leaders of change must have a clear idea of the kind of improvements and changes that are desirable, and this guiding idea must be kept constantly in mind in working out the various means for bringing about change.

India's democratic and socialistic approach to planned development is well known. As is true in many developing countries, the Central Government gives leadership through the formulation

and implementation of the Five Year Plans. These Plans deal with agricultural productivity, industrial growth, hydro-electric power projects, population control, international trade, handicrafts and small-industry development, village and community development, local government, health, expansion of education, and many other areas of Indian life.

PLANNED CHANGE AND HUMAN FACTORS

India's various schemes for development are well known; it is also well known that efforts to date have been less than successful, in most cases. The reasons for this are several, including the very size and complexity of the task of creating a new nation as well as dealing with the many socio-economic problems facing India. Underlying the reasons for disappointing results may be the fact that the nature of the task itself has been somewhat misjudged. In India and other countries, leaders and planners have conceived of development as having largely to do with finance, trade, production, standard of living, natural resources, skilled man-power, technology and industrialization. This emphasis on the economic and technological aspects to the neglect of human values, motivation, cultural traditions and purposes of living certainly has something to do with slow progress in many areas of development. For instance, the problem of increased agricultural production is as much a matter of motivation and social values as it is a matter of improved seed, fertilizer or mechanization. The problem of improved administration, which hampers most development projects, is more a problem of attitudes and values than of technical know-how, organization or staffing.

Increased concern for the human factors in change will naturally lead to greater emphasis on the contribution of education to development. But even in education itself, where human behaviour is central, there has been inadequate recognition that the very essence of human personality is involved. This was illustrated recently in a meeting of state education officials where the implications of studies of change for education were being discussed. One of the participants commented: "But we don't normally think in terms of change; we think in terms of progress and development." Apparently what this participant had in mind was that progress and development in education, and in other aspects of-

Indian society, can take place without in any serious way disturbing the set ways of living, thinking and feeling of individual people. Some national Indian leaders seem to say the same thing when they state: "We are intent on becoming a modern, industrialized society within the framework of our cultural traditions, without compromising the historical genius of the Indian mind."

The question of the relationship between cultural traditions and change will be taken up in the next chapter, but at this point we wish only to argue that the progress and development Indian leaders want to achieve in all areas are impossible without significant changes in human values, attitudes and aspirations. For instance, to achieve desired improvements in education it will be necessary to gain acceptance of purposes of teaching more in tune with national development goals; this requires change in the concept of good education held by parents, teachers and the students themselves. Likewise, to evolve the kinds of working relations between school administrators and teachers so necessary for productive work towards school improvement requires considerable alteration in traditional ideas about authority and how it is to be exercised; these are matters central to human personality. Schools will not become clean, orderly and attractive places in which to encourage learning without serious modification of esthetic values, habits of living, and understanding of how learning takes place. Education will not be removed from the negative influence of politics unless educational administrators and politicians alike become willing to compromise personal ambitions in the interest of education; this requires growth in self-discipline and sense of responsibility among educators and politicians. In fact, education will not change significantly until large numbers of people throughout Indian society want it to change, and this desire will result only from changed attitudes and values and increased willingness to work effectively for change.

To argue that progress and development in education requires substantial change in people is not to argue for a direct approach through coercion or to suggest that everything traditional is wrong and must be replaced. Quite the opposite will be suggested in the chapters that follow. It is important, however, for planners of development projects and agents of change to understand the nature of the problem and to realise that results are possible only through means which are appropriate to the problem. The key

is to discover interests and needs, provide for interchange of experience, stimulate the ferment of ideas, release human creativity, encourage innovators and coordinate efforts in agreed-on directions. Unless an approach is used which motivates *individual human beings* and help them to do what they want to do in the context of their own problems and goals, all the schemes, Five Year Plans and foreign aid will be of little consequence. Failures to date in India's development plans may be due more to neglect of human factors than any other cause. This is probably as true in programmes for the improvement of education as in programmes for progress in other areas.

PROCESS OF CHANGE

The term "process of change" suggests an orderly, organized, step-wise series of actions which, if taken, will result in achieving desired progress or development. In other words, the process by which individual persons, groups of people, and societies as a whole go through significant alteration may be defined, described and delineated. *The social and behavioural scientists might agree to this general definition of the process of change, but they would be the first to point out that it is a gross over-simplification. Human beings are far too complicated to make possible a simple, clear, predictable picture of what is involved in a change. The dynamics are far too complex to lend themselves to comprehensive analysis by experts or understanding by the non-specialists.* If the process of change were clearly definable and predictable, then the task of planners and leaders of change would be an easy one. They would need only to follow a set of simple rules and procedures and societies could be revolutionized. Unfortunately this is not the case; or may be it is fortunate, for such a simple process would render people subject to the manipulation of strong-minded leaders whose purposes of change might be wholly contrary to the wishes of the people. History is full of such attempts, and it is not our purpose here to make *easier* the work of such would-be leaders.

The process of change is neither easy to understand nor to guide. Nevertheless, there are things that can be said about it which should help the planner and leader of change to be more effective. The chapters that follow attempt to set forth, explain

and illustrate those generalizations which seem to be reliable from research and from experience. Until recently the studies of cultural anthropologists and other scholars have been concerned mainly with simple island and tribal societies in which social processes could be easily observed. In recent years, however, scholars have turned their attention more and more to growth processes in highly complex societies, underdeveloped and industrialized, and in societies in which rapid economic and social advance are being attempted. Many of these more recent studies have been carried out in India, Africa, the Middle East, South America and other areas have come in for considerable attention.

To an increasing degree planners and administrators of development projects and scholars of change process are working together; however this cooperation should be increased further, both to improve the scientific bases of planning for change and to bring the research scholar more centrally into the milieu of practical situations and problems. Further testing and refinement of what is tentatively known can come through promoting exchange of experience among development workers in various areas such as community development, health and education. Certainly educational workers can profit from the experience of other workers from whom they have been relatively isolated during the early period of Indian development.

ORGANISATION OF THIS BOOK

As indicated above, change is possible only through modification of human characteristics. The process through which desirable modification takes place has to do with interaction between traditional culture and innovating ideas; motivation and readiness for change; cause and effect relationships and interaction among the steps and phases of development; and influences of leaders, associates and groups. A major influence on readiness for change comes from traditional ideas and customs embodied in the social culture. This influence can be either in favour of change or against it; very often the relationship between tradition and innovation is many-faceted and multidimensional, and requires careful and understanding analysis. This complicated area will be discussed in Chapter 2. As will be analyzed in Chapter 3, change in human beings, to be meaningful and lasting, must be based on

readiness and inner direction; therefore, factors of social and psychological motivation are paramount. *The dynamic social interactions set in motion by each step in the process of change often leads to unpredicted results or unanticipated side-effects. Modification of a particular practice may disrupt the system of which it is a part, with confusing consequences.* Or, the introduction of a new technique may reinforce other tendencies to change and 'surprising advance is made. Individuals react to innovation in different ways and their reaction affects close associates. Group standards tend to control the behaviour of individuals in the group and they must be recognized in planning change where groups are involved. These and other factors of dynamics will be discussed in Chapter 4.

Perhaps the most important *elements in bringing about development in any society are those of leadership and group support. In addition to official leaders, institutions and organizations, unofficial leaders and social groups are also important. Leadership is required which recognizes principles of social change, which takes leadership in demonstrating, initiating and supporting innovations, and which capitalizes on group dynamics.* Chapter 5 deals with such aspects of leadership and support for change programmes in education.

And finally, there is an emerging role in India for the leader of change who has little official authority. *All persons in positions of leadership, whether they be elected, appointed or accepted by consensus based on obvious personal qualities, are potential agents of change.* To varying degrees these leaders make use of authority *to get the job done.* In a traditionally autocratic society this authority is necessary to the accepted performance of leadership. It is also a handicap; particularly where the kind of development and change desired is *dependent on free communication and willing cooperation among all levels of society.* In terms of Indian goals of development this seems a critical matter. In many aspects of life the newer hopes and desires for progress will not, *cannot be achieved by waiting for government leaders to say exactly what should be done. This is where the agent of change sans authority comes in.* He is in a position to work with people at all levels without the usual blocks to full communication coming in the way—blocks which are normal between authority and the people, *between different levels of*

authority, and between different levels of society. He is a new "specie", he has little tradition to guide him or to determine individual and group reaction to him, he can more easily use new methods of work and build new kinds of human relationships. He may be more able to kindle a spark in people who traditionally wait for the light to come from above. This new being, the agent of change in the pure sense, is a phenomenon of recent decades. He is the community or village development worker; he is the social service agent; he is the agricultural extension worker; he is the coordinator of extension programmes for schools. And, of course, he is the foreign advisor, the consultant connected with technical aid programmes. The final chapter, Chapter 6, will focus on the problems of such agents of change in education and the peculiar function they can and must serve if the process of change in education is to become more scientific, more effective and more in line with the best that is known about the modification of values and behaviour.

ILLUSTRATIVE INCIDENTS IN THE BOOK

We have used illustrative incidents in the beginning and throughout each chapter. The main purpose of these incidents is to show the practical application of one or more generalisations. These incidents are based on actual experience. However, some variations have been made in recording them to point up a particular principle or general idea. In some cases the stories have been changed so as not to reveal the identity of the actual persons described.

The incidents have been drawn from many sources. Some incidents are from our own experience, some were suggested to us by other educationists, while others were taken from those contributed by extension coordinators. In most cases the incidents are drawn from the field of education; however, examples from the broader culture have been used where they served more fully to illuminate a point. Responsibility for the description of them rests, of course, with the authors.

A WORD OF CAUTION

It is hoped that the chapters which follow will help the many

leaders of educational change in India to avoid some of the mistakes which have been made in times past by the Amanullah Khans, and in recent history by innumerable planners and leaders of change in developing countries including India. This is a huge challenge knowing as we do how complex, how unpredictable and how uncontrollable is human behaviour. Nevertheless, we venture to suggest how the major lessons from research and experience seem to apply to the process of changing Indian education. These suggestions are built around generalizations. A word needs to be said about these generalizations.

It is difficult to lay down principles or laws which definitively characterize the behaviour of people. The generalizations stated and discussed below should not be viewed as principles or laws which are infallible. As is true of generalizations of all kinds where human nature is involved, they are subject to argument, to exception and to different interpretation. It is hoped that they characterize what is true in a majority of situations, barring unusual circumstances; but then there are always unusual circumstances. They should be viewed more as hypotheses than as principles, hypotheses which have to be proven anew, or disproven, in each new situation. The agent of change in education will particularly want to view these generalizations sceptically because few of them are derived from research on change in education. He will want to interpret them in the light of his own experience and in terms of the situations he faces in his own work. He will want to accept the fact that his own judgement of what is the best approach, the best technique, the most promising answer will give him the most dependable guidance. It is hoped by the authors that the generalizations central to the chapters that follow will help to refine and deepen that judgement.

SUGGESTED READINGS

Literature on planned change has been growing steadily in the last decade. The authors have benefited from this literature, and have used in this book several generalizations emerging from research reports and other writings. There is a natural temptation of sharing some of these with the readers of this book. This

will be done through suggesting some readings at the end of each chapter.

Selected readings suggested at the end of each chapter refer to the annotated bibliography appearing at the end of the book. Only books and monographs have been included in the bibliography. At the end of each chapter, the references are given by authors' names and years of publication. These references can be seen at the end of the book, where these appear in the alphabetical order of the authors' names. The bibliography is not classified; however, for the sake of the readers' convenience a few categories are suggested in the beginning of the bibliography.

CONCLUSION

We have not attempted to define in simple terms what is meant by "process of change". It does not lend itself to simple definition. Rather, we have meant to indicate that this whole book, and others referred to at the ends of chapters, represent attempts to describe, delineate and illustrate what is involved in the process of change. Perhaps the reader will be able to give his own definition; but what is more important, he may be able to understand the complexity of change in human beings, translate his understanding into operational terms and apply it in his work. That is more important than a simple definition.

SUGGESTED READINGS*

1. Abbott & Lowell, 1965, chaps. 2 and 5.
2. Allen *et al.*, 1957, chap. 2.
3. Blanke, 1966.
4. Carlson, 1965, chap. 1.
5. Carlson *et al.*, 1965 (a), chap. 3.
6. The challenge .., 1966, pp. 12-19.
7. Etzioni & Etzioni, 1964, chap. 27.
8. Harris *et al.*, 1965, chap. 7.
9. Hartlay & Halloway, 1965.
10. Heinrich, 1967 (Unit six and seven).
11. Holdgkin, 1957.
12. Hug, 1965.
13. King, 1967.
14. Leeper, 1965, pp. 29-54.
15. Leeper, 1966, pp. 43-59.
16. Miller, 1965, chaps. 1 and 4.
17. Miller, 1967, chap. 1.
18. Miles, 1964, chap. 1.
19. Spindler, 1963, Part 1.

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* The books referred to in this list are included in the select annotated
bibliography appearing at the end of the book.

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The Setting:
Culture and Change

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I have felt your muffled steps in my blood, Everlasting past,
Have seen your hushed countenance in the heart of garrulous day.
You have come to write the unfinished stories of our fathers
In unseen script in the pages of our destiny;
You lead back to life the unremembered days
    for the shaping of new images.

       — RABINDRANATH TAGORE

GENERALISATIONS

THE following generalisations about culture and change will be
discussed and illustrated in this chapter:

1. Planned social and economic development implies change in
   traditional values and practices; traditional culture is cha-
   racterized largely by its value system, and the acceptance of
   science and technology depends on, as well as causes, change
   in traditional values and related institutions and practices.
2. Traditional values and institutions, while subject to neces-
   sary change, provide for order and predictability without
   which planned development would be impossible; they give
   desired psychological security to persons threatened by
   change, and they provide the vehicle for change even while
   they themselves are undergoing change.
3. Traditional values and their related social institutions and
   practices, are perpetuated because they have functional
   worth to the people of a society; it follows that change must
   prove its worth to the people if it is to become an accepted
   part of life.

4. Change should be viewed more as development from within tradition than as "a break with the past"; careful planning for change, therefore, requires thorough analysis and understanding both of tradition and of proposed innovations, and of predictable interaction between the two.

5. Mechanisms and procedures for introducing, accepting and assimilating change are present in every culture: they vary in sophistication among cultures and cause varying kinds and speed of change; variations in kind and rapidity of change also occur from one historical period to another in the same culture.

6. Successful transfer of ideas and practices from other cultures depends on careful timing, adaptation to local conditions and needs, thorough integration with the customs and values of the receiving culture, and meaningful involvement of indigenous creative effort in planning for their use.

7. Innovations which are intended to replace existing practices, institutions or values, are likely to be more slowly accepted than innovations which are additions to the culture or merely variations of traditions.

INTRODUCTORY COMMENTS

Traditional Culture and Change

The thesis of this chapter is that any development programme which does not adequately take into account the cultural setting is bound to fail, or to be less than successful. To understand our argument it is necessary to understand what we mean by "culture". We shall use the term in its sociological sense to mean the sum-total way of living of a group or of a people, including the customs, attitudes, beliefs, institutions, social process and human relationships, and the system of values underlying them. When the elements of a culture are largely those perpetuated over many generations or many centuries, we speak of traditional culture. At any one time any culture includes elements some of which are very old and some of which are relatively new.

To be more detailed, culture includes such elements as religious beliefs and rituals; patterns of social grouping; relationship among groups; occupational specializations; customs of marriage and child-raising; food habits; social organizations and institutions;

methods of governing; means of æsthetic expression; fashion of dress; standards of acceptance and success; manners, ethics and morals; methods of meeting crises; processes for selecting leaders; leadership and followership roles; techniques for punishing social offenders; and language, gestures and other means of communication. Underlying and permeating these and other cultural elements is a *system of values*. Values are the effective criteria by which choices are made among alternatives. They are clues to the preferences of the people. Members of the culture have strong feelings about them. They give meaning and purpose to life. Values take the form of principles of life; individual and group goals; standards of right and wrong, desirable and undesirable, good and bad; relative worth of old and new; tendencies of response to new situations; and relative importance of material and spiritual things. Such values determine the character of a society.

The value system gives integrity and predictability to social processes. Without such a system there would be chaos, with the individual constantly striving to find himself in a moving sea. Knowing the value system of a culture is like being given a map of a country. You know where things are in relationship to each other. You know how to get around, to get things done. You can understand why the people behave as they do. You can see why some matters are given priority over others, and why certain kinds of behaviour are accepted and others rejected. For the person brought up in a culture the value system gives him security. It provides a guide by which to conduct his life. He may choose to violate traditional norms, but he does so knowing that he is stepping outside the generally accepted system.

Although the values of some cultures are more encouraging of change than others, all cultures have strong built-in forces for continuity. Even in a country like the *United States of America*, where relatively great importance is given to novelty and invention, there is also a strong tendency to perpetuate a way of life. India may be thought of as a traditional country not only because of her long and rich cultural heritage, but also because more importance is attached to things old and traditional. A person having too many new ideas comes under suspicion. Young people, who tend to be more adventuresome, are given a minor place in society, and older people, who tend to look back with pride on

the wonderful things of their youth and of their ancestors, are looked to for wisdom and guidance in the making of most decisions. Too few institutions and organizations have existed in India, until recently, for the purpose of altering traditional customs and finding better ways.

In all societies, not only in India, there are forces opposing change. Children are brought up by their parents and thoroughly enculturated before they are old enough to know their own minds. Some revolt in their youth and set new patterns of behaviour; others revolt for a period and then return to the established ways of their family. Others, perhaps a majority in most cultures, do not revolt in any serious way, and so they contribute to the perpetuation of traditional ways. Another factor which works against change-proneness is the tendency of human beings to glorify their past. A person who has had a very difficult childhood will say in later life that things were not so bad when he was young. A person whose father was a tyrant will mellow in his feelings towards his parent as he grows older. Human beings tend to remember the good in the past and to forget the hardships. Pride enters in also; persons who have been less successful than they hoped to be, or who can find little to be proud of among their generation, like to build up their heritage into something truly great; and so history gets rewritten, in the minds of people if not in actual print. And then there is the natural feeling that "our way is the best way" which works against open-mindedness towards new ideas.

Cultures and Sub-cultures

We speak of the culture of a country or of part of the world. We sometimes speak of Western culture, although we know there are great differences among the culture of, let us say, Italy, England and the United States. We speak also of Oriental culture although we know there are major differences among the countries of Asia. We may also speak of the culture of a particular country, particularly where the majority of the people share a history of sufficient duration to have built up common ideas, customs and experiences. This does not mean that uniformity of culture necessarily exists throughout the country, but that there is a significant degree of commonality. Japan may be considered a country with considerable homogeneity in its culture; the United

States is a country with a relatively heterogeneous culture. In both cases historical factors have played a major role in determining the character of the culture.

We speak of Indian culture because the people of India hold many cultural elements in common. This is true because of the long history of the Indian people and because of geographical factors which tend to make the Indian sub-continent a geographical unit of some consistency. The people of India, or the majority of them, have in common a large number of values, sentiments, attitudes, customs and traditions which make it possible to talk about Indian culture. But at the same time, perhaps no other country of the world has a culture so full of variations and so complex; India has many sub-cultures. These sub-cultures are of many kinds. There are the religious communities, each with its own cultural traditions—Hindu, Muslim, Christian, Jain and Sikh, to mention only the major ones. There are geographical sub-groups which, to some extent, have been influenced by historical events. South Indian culture differs from North Indian culture. The western States claim characteristics unique to them. The extreme eastern parts of the country have been more influenced by Chinese and Burmese culture, and they have their distinctions. The people of the Punjab, Sikh and Hindu, are proud of certain cultural achievements which pre-date partition when the Punjab was a rich source of agricultural products and an example of a way of life. Within the majority sub-group, the Hindus, there are sub-groups whose way of life is built around unchanging occupational roles and hierarchical status. We refer to the Hindu castes, each of which has its own outlook on life, customs, rights, responsibilities, and place in the over-all structure of Hindu society. Other sub-divisions in other sub-groups of the total Indian culture could be mentioned, and some will be in the discussion following.

These diverse cultural patterns are something to be proud of, where they result largely from mutual tolerance and respect and where they represent the natural, voluntary development of groups of people along the paths they have set for themselves. Where they result from social strictures on development along natural lines, such as in the caste system, they represent one of the cultural characteristics most people agree should be changed, and it is changing gradually. Some people are bothered by the degree

of cultural diversity in India; they see it as a threat to national unity, and so greater national or emotional integration is a goal of development efforts. The national slogan "unity with diversity" is evidence of the desire to find the right balance between opposing values; whether or not they really are opposing is another question, which we will not pursue here.

Cultural diversity does pose a problem to development planners, however, if the suggestion that culture and development should be interrelated is taken seriously. It means, to a degree at least, that the various groups should be encouraged to develop in their own way. This means that a different model of good education should be allowed among, let us say, the Naga tribes and the people of Bombay city; that the improvement of health is a different problem among the Christian community than it is among the Jains. It means that the problems of agriculture in the valleys of Assam and in the Punjab should be treated differently. Going still further, it means that farmers' motivation for increasing their yield will differ from village to village, depending on the values of the people of the village—what they feel is important in life, what criteria they use in deciding what they do and do not do. It means that varying qualities and degrees of pride taken in handicrafts should be recognized in programmes for the promotion of small industry development in different parts of the country.

To some extent the government has recognized the characteristics and needs of cultural sub-groups in its development plans. Special provisions have been made for the Harijans, for instance, in recognition of their underprivileged status. Legislation aimed at disentangling government and religion is in recognition of cultural diversity and the responsibility of the government to play a neutral role. But government always has a problem of recognizing cultural and geographic differences. On the one hand, if the attempt is made to make distinctions, the government can be accused of discrimination. On the other hand, government personnel, by training and tradition, tend to administer uniformly. They have difficulty in living at the same time with several interpretations of the same regulation. It looks more efficient and it is easier to apply the same criteria to all groups, to all regions, to all states, and so government programmes tend to become uniform programmes. It seems equitable to say that what applies

to one person or group should apply to all others, ignoring the differences that exist among individuals and among groups. There is some evidence that this problem is beginning to be recognized in Central Government schemes. Recognition of the need for flexibility in programmes is dramatized by the refusal of some states to cooperate fully with Central projects, and the refusal to accept grants for uniformly administered programmes. This will remain a major problem for some time to come, and it is one which we will discuss in this and the following chapters.

Role of Values

The above may serve to clarify our feeling that cultural factors should be carefully considered in any attempt to promote change and development. Later sections of this chapter will deal in more detail with certain generalisations about culture and change. Before coming to them, more should be said about cultural values.

Discussions of traditions and change usually focus on *values*. These discussions usually end in confusion, partly because the term means different things to different people. To some people all values worth considering are rooted in religion and they discuss them only in religious terms. They speak of renunciation, glorification of the spirit, and oneness with God. They draw a line between spiritual and material values, and deplore the latter. Others take the opposite view, pointing out that the low state of human affairs may be largely attributable to a culture dominated by spiritual values as against material and human values. To them values are to be derived from human potential and man's efforts should aim at bringing order and meaning into life.

Some people are revivalists. They believe the solution to today's problems is to be found in reviving the traditional values of the glorious past. They speak of subservience of self, sanctity of knowledge, self-perfection, tolerance, self-control, universal outlook, unity in life, intelligent optimism, and balance between spiritual and material things. To the revivalist, these and other values characterize the lost heritage of India. In their glorification of the past they forget that these ideal values were pursued in the past by a minority of the population, and that they do not really characterize life as it was lived by the masses. They also tend to forget other values which are associated with the

past which are less ideal, including arbitrary hierarchy in all aspects of life; subservience of women to men; a deterministic view of life which put man's destiny in the hands of fate, the Gods and natural forces beyond his control; and heavy reliance on superstition in daily affairs.

Another person may be a revolutionary who believes that the past is dead and ought to remain so; that all that is traditional is contradictory to modern science and rational goals of living. He forgets that for a majority of Indians the past is not dead, and that to abandon their tradition-bound way of living quickly would require drastic traumatic experiences beyond the ability of human personality to endure. He also ignores the many qualities of traditional ways which may have meaning for life in the future as well as in the past.

In understanding the values of any culture, particularly of a culture with a rich heritage such as India, it is important to make a distinction between idealized values and behavioural values. Idealized values may be those found in the ancient scriptures or philosophical treatises. They may be representative of the actual way of life that existed, or they may represent only the way of life of a particular class or group in the past. Nevertheless, people have come to idealize those values, to worship them, and to long for resurrection of the way of living they represent. Behavioural values are those reflected in the day-to-day life of individuals and groups. They are more down-to-earth, practical and satisfying to the daily wants of people. Some behavioural values may have a positive social acceptance and they are openly recognized and discussed, such as the values inherent in the large family system, or brotherhood, or honesty. Others may be equally operative in life, but they are not openly respected, such as those governing dishonesty and corruption in business and government life. Idealized honesty and integrity is one thing; the concept of honesty and integrity that really operates, may be quite a different thing.

Although this distinction between idealized and behavioural values cannot be drawn too closely, it may help in understanding some of the inconsistency found in values. The idealized values serve a reference purpose, but they do not operate in daily life. They are still powerful, however, because they represent the ideals and dreams of people. They influence thinking and beha-

viour even though they don't characterize it. Behavioural values are usually less ideal, less perfect and less theoretical, and more directly characteristic of actual behaviour.

Another kind of inconsistency further complicates understanding of values. A person may outspokenly justify preference for a particular way of thinking, and in his private life he may directly contradict himself in what he does. For instance, a science teacher may explain in detail to his students the importance of the scientific attitude; in his family life he may consult an astrologer before setting the dates of important events. Such inconsistency comes from a conflict in values. Or, an administrator may abhor the way his superior treats him, resenting being dictated to and having his ideas ignored. He may, in the next moment, turn to a subordinate and treat him in the same way. Or, a man may be scrupulously honest in his day-to-day business transactions and pride himself on his reputation for honesty; in reporting his income to government, however, he may be considerably less than honest without any twinge of conscience. Or, a person may argue passionately for equality and social justice, but shudder privately at the practice of widow remarriage and consider it as totally unacceptable.

Another complicating factor is that in a value system same ideas carry more weight than others, that values are relative. Some people value learning more than economic gain, and decide to spend more time in reading and study than in pursuing various ways of making money. In some cultures individual independence is given higher priority than family cohesion, and so the small family is common and the extended family unit is unusual. A new grain may be introduced in a rural community which has the advantages of higher yield per acre, greater resistance to disease, and easier harvesting, and it may be rejected by the community, because they do not like its taste. In food, taste may have higher value than any other factor. Because values are often based more on emotion than on reason, value-decisions often appear to make little sense, especially to the outsider who has a different set of values. A teacher may become interested in spending more time on improving his teaching. He can see professional reasons why he should—there is much more to be done to give a good education to his students, better education is important to his country, the community will reward

him by their praise, and he may get a promotion more quickly. On the other hand, it is hard to steal the time from his many family obligations; these obligations are expected from him, he would not like to be criticized for neglecting them and, above all, he gets a great deal of emotional satisfaction out of family relationships. He chooses to continue to neglect his teaching, even though there are many good reasons why he should not. In making this choice he seems to be ignoring what is reasonable. To take another example, there is increasing evidence that smoking is seriously damaging to health. When the medical reports indicated a strong connection between smoking cigarettes and lung cancer, many people stopped smoking, for a while. When the shock of the reports wore off, however, many returned to smoking cigarettes, and now it appears that the number of cigarette smokers is greater than ever. In this case emotion and habit seem to win over intelligence.

It is not our intent herein to try to resolve all the confusions that exist in understanding and agreeing on a concept of values. We should, however, attempt to indicate generally how we are using the term. Basically, our concept of values is that they are functional, they effectively operate in the lives of people. We are not concerned with traditional values unless they do influence human behaviour, or can be made to do so. To talk about idealized life at some earlier period for some people but which are now dead and cannot be revived is to speak theoretically, not practically. We are concerned with current, functional values; we are also concerned with alterations in values and with new values which are necessary to Indian development. If the Indian heritage can be used as a source of essentially new value concepts which are both practical for the needs of Indian development and at the same time provide some element of continuity of Indian culture, so much to the good. But the past should not be viewed necessarily as the major, sacred, infallible source of what is needed today, and any attempt to resurrect it by force is doomed to failure. Ideas from the past should stand the same test as ideas from foreign countries, they should be capable of making a contribution to the present and the future of India; they should be pragmatic.

Furthermore, in our attempt to be current, practical and realistic, we accept as values any criteria of worthwhileness which

actually influences behaviour, whether or not the value is generally considered good. In the next section we discuss several current Indian values which seem to be negative, or to require modification to serve the goals of progress. To give one example, status and security of position is a value which seems to dominate the decisions of many people, to the exclusion of other values which should be of at least equal importance. The professional dedication needed in so many improvement projects is seriously limited by the strong interest in this one value, and improvement in quality of work will not come without an adjustment in the balance between professional concern and status and security. To take another example, a high value is placed on attaining a college degree. It is a status symbol, of considerable worth in itself. This value is so strong in urban culture that it takes priority over most other educational considerations, and this emphasis seriously handicaps many planned efforts to improve the quality of education, or to limit higher education to those students capable of significantly benefiting from it.

And finally, two other related points as to cultural values are required to understand our point of view. The characteristics and behaviour patterns of a culture, and their underlying values, belong to individual persons. Although we speak of the culture of a group, or of a country, the essence of cultural elements is in individual human beings. The commonality of these elements in individuals help to make for cultural unity, for functional group interaction and for organized, purposeful living together. Differences in cultural elements among individuals, and conflicts in values and purposes within individuals, often lead to tensions and to change in cultural characteristics and values. When such change occurs, it occurs in individual people and it affects their behaviour with each other, with resulting group change in culture.

The second point is that culture is learned. It is not biologically or genetically determined. It is not a matter of race. It is *not the result of supernatural* power or of fate. It is not a part of the nature of the universe. It is learned by individual people, and it is learned largely from the social environment. The young child is born with certain natural wants; these wants are satisfied with certain kinds of food, certain means of showing affection, and certain accepted ways of expression. These are learned from his family

who follow patterns of child-raising common to their culture. As he grows up he learns from his parents that certain ways of satisfying his emotional needs are accepted and others are not. He begins to learn the values of his people. He is rewarded for some kinds of behaviour and he is punished for others. He comes to admire certain persons, and he places greater value on things associated with those persons. Gradually he learns to respect authority, that of his parents or that of community leaders; and he comes to respect and value those ideas and practices endorsed by authority. As he grows older he begins to reason, to reflect, to meditate, and to question what he has been told or has learned through observation, and as a result of intellectual activity he develops new or altered ways of viewing life. He develops his own personality, his own sense of worthwhileness, and his own set of values. As he approaches adulthood, and throughout life, through study and thought, and through constantly changing experience, his cultural concepts may change. In many people personality and character are pretty well set during the younger years, subject to less and less change as maturity develops. It takes an unusual experience, a startling intellectual influence, or strong influences from a changed environment to bring about significant change. In others, possibly because of the inculcation of less rigid values during childhood, behaviour patterns and values are more malleable, more subject to influence.

The fact that cultural characteristics belong to individual people, the fact that they are learned, and the fact that no two persons respond to cultural stimuli in the same way, have important implications for planning change. If culture is learned, it can be unlearned, or altered in the human personality, more easily among young people but also among mature persons. If cultural behaviour and values are individual, then the individual can do something to bring about change, he can take initiative if he is convinced that change is needed. If different people, even in the same culture, have different cultural characteristics, these differences can be used in promoting change. Some persons will be more disposed to some new ideas than others, some will react in intellectual terms and others in emotional terms, some will play leadership roles either for or against a new programme, others will be willing to follow. It is easy to be discouraged by the apparent solid front put up by the total culture of a group, and

think that no impact can be made on a society with so many common characteristics at variance with what is needed for development and progress. Some optimism can be generated by the recognition that a group is made up of individuals, and that individuals within any group differ, they can learn, and they can influence each other, if they have a reason for doing so.

INCIDENT A

The traditional method of teaching in the training colleges is to give lectures to the students who listen and take down notes. Sometimes they are allowed to ask questions, usually at the end of the lecture. One lecturer became dissatisfied with this method. He felt it required students to play a passive role in which too little was learned. He decided, therefore, to try methods which required student participation, assignments and classroom discussion.

The teacher announced his plan to his students and explained briefly why he was introducing a change in method. He made it clear how his role would be different, more of a guide and consultant, and how the student's responsibilities would differ. Very carefully he planned group assignments based on different aspects of the syllabus. He also suggested references for students to use. Each group of students was given an assignment to work on one week in advance of class discussion. When the class met the teacher raised questions on the assigned topic and the appropriate group responded, making use of the information and views they had acquired from their reading. As the discussion developed other students were drawn into it.

After one month the teacher discovered that only two topics had been covered. He was disappointed. Students were hesitant to get involved in the discussion. More than half the class still remained passive. His many attempts to draw them out were not successful. One reason was obvious; they had not done the assignments properly. The teacher tried several variations in the method, aimed mainly at increasing student motivation and interest. He continued his experimentation over the whole term, but at the end there was little about which to feel encouraged.

In fact, he was in trouble. He learned from some of his associates that the students were dissatisfied that he had not covered all of the syllabus. They were also confused as to why he had deprived them of his inspiring lectures during which they could have taken well-ordered notes. In the absence of his organized lectures they had decided to memorize the textbook, and this kept them from reading any of the other references assigned. After some doubt and introspection, the teacher returned to the lecture method the next session.

What part did cultural factors play in the failure of this innovation? What different or additional steps might have been taken? Are the students to be blamed for not accepting the teacher's new methods?

INCIDENT B*

In a gathering of schoolboys in Madras in 1955, the Director of Public Instruction noticed two boys swooning. On enquiry he was told that this was not uncommon; many boys came to school having had no food in the morning, and what they got after returning home after school was not suited to their physical needs. This incident, and other similar ones, gave impetus to the idea of providing healthy mid-day meals in the schools. Soon after, in a general meeting of primary teachers, the DPI discussed the problem and pleaded with the teachers to work locally for voluntary support for mid-day meals. The President of one of the District Boards recorded an appeal for *annadan* (voluntary offering of cereals). This recorded speech was relayed to many public meetings.

A movement was launched in many places in the state for the voluntary collection of foodgrains for schoolchildren. It was given support both by newspapers and public leaders. Non-official committees were formed to plan how to handle the movement. It was organized in different ways in different places. In some communities big and small landowners contributed their share of *annadan* at the time of harvest, according to the amount of land they held. In other places mothers put aside a handful of rice each time they cooked, and this rice was collected weekly by the schools. In one village 100 empty matchboxes were given to each student who brought one matchbox full of grain every morning.

In the larger towns cash donations were solicited. Voluntary efforts were made to enlist the cooperation of wealthy persons to finance the mid-day lunch of a school by rotation among them, covering the whole year. An interesting method was introduced in some Basic Training Schools in which trainees were asked to contribute 3 or 4 annas each per month. This money was used to provide for cooking a larger quantity of rice in the Training School kitchen and the extra rice was provided for the children in the model school. In some places teachers and daily wage earners contributed in cash, one paisa (old paisa) per day per person.

This innovation was very successful in Madras. It grew in size until the government took it over and put it into operation all over the state, assigning a special officer to the scheme.

What cultural factors helped to make this new programme successful? What other traditional values or customs can be used to assist the introduction of innovations?

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* This incident in taken from *Harnessing Community Effort for Education: A New Experiment in Madras*, by N. D. Sundaravadivelu; Madras: Director of Public Instruction, 1962.

DISCUSSION OF GENERALISATIONS

Social Development and Cultural Values

If the values of a culture are those emotionally committed ideas which give a culture its character and direction, many significant changes in ways of thinking and living are possible only with accompanying changes in values. Consider one aspect of Indian culture which is undergoing considerable change—the status and role of women. The Constitution gives women suffrage rights equal with men. Educational opportunities for girls are increasing and greater numbers of girls are going to school. The age of marriage is gradually rising and child marriage is on the decrease. Increasingly, among some groups, the young man and girl are allowed some say in the choice of their mate. More and more women are finding their way into professional vocations and other work outside the home. These substantial changes in one aspect of living are taking place because India's economic development both requires and makes possible greater opportunity and freedom for women. Accompanying these changes are changing values as to the proper role of women in Indian society.

Similarly, development envisaged by Indian leaders and embodied in the five year plans is dependent on change in values. For example, successful industrialization will produce and will be accelerated through changes in attitudes toward manual labour. Improvements in health practices involve changes in the religious values underlying such practices as the drinking of water from holy rivers. Efficiency and integrity in government operations are possible only with a change in balance between job security and family and group loyalties, on the one hand, and vocational commitment and honest administration on the other. The quality of education can improve only as parents, teachers and students develop a different concept of standards of good education. Equality of opportunity, a fundamental principle of socialism, is possible only through continued change in caste values. In short: (1) *Planned economic and social development implies change in traditional values and practices; traditional culture is characterized largely by its value system, and the acceptance of science and technology depends heavily on, as well as causes, change in traditional values and related institutions and practices.*

What are some of the current values which may change in terms of the development goals India has set for herself? We will make no attempt to be exhaustive, only illustrative. The reader may differ as to the existence of the values we mention, and he may be right, for current Indian culture is many things, as we have said above. Let us begin with *tolerance*. Tolerance is one of those traditional values which is still operative today, in some situations and in some ways. It resulted historically from the multi-racial, multi-cultural makeup of the Indian people. It became an element of Hindu philosophy and is, in part, responsible for the emphasis on synthesis of ideas from all religions, concern for others, *ahimsa* (epitomized by Mahatma Gandhi), and coexistence (emphasized by Nehru). And yet, tolerance, as it operates today, is a rather limited concept. It seems to mean "live and let live" rather than understanding and respect for cultural differences. It seems to have little depth. It takes only a spark to set off violence over the language question, or over the question of refugees between India and Pakistan. Such violence is usually between or among groups of different cultural traditions. Also, concern for other people may not be a very deep-seated value among many groups. Social service programmes are generally poorly supported in many parts of the country. When villages on the edge of Delhi were inundated by floods in recent years, it was mostly Christian and foreign groups which came to their aid; the majority of Delhi residents showed little concern in spite of the publicity given to the problem in newspapers. Such lack of concern may be more characteristic of the people of large cities, but large cities are an increasing part of the Indian situation. It would appear that some rethinking and deeper application of the fundamental idea of tolerance is needed if cooperation is to be effective in solving many problems.

Another dimension of the problem is that tolerance can play a negative role as well as a positive one. When thought of along with open-mindedness, acceptance of differences, independent thinking and social consciousness, tolerance has a positive connotation. When grouped with avoidance of responsibility, social lethargy, dependence on authority, and lack of social awareness, tolerance becomes a negative concept. Far too many evils are tolerated by people who could do something to correct them. Far too many contradictions in practice are accepted within the same

personality, within the same programme or institution.

Another value that contributed to the development of Indian culture is the emphasis on *excellence*. As historians point out, at all times in the past this value has been emphasized—excellence in food, dress, the arts, and literary works. It contributed to the development of the highest quality of music, architecture, and sculpture, and led to the production of excellent handicrafts such as muslin, silks, perfumes and metal implements. Emphasis on achieving perfection (*sadhana*) has played an important part in the life of philosophers, artists and religious leaders. And yet, because of the feudal structure of Indian society, the benefits of the emphasis on excellence were limited to the elite, and they were used to build even more rigid distinctions between the upper classes of people and the masses. If the objectives of the socialistic society are to be achieved, the place of excellence will have to be reconsidered and given a broader base.

There is another current manifestation of the emphasis on excellence which should also be recognized for what it is. In times when the drive for excellence is so often frustrated by the complexity of problems and lack of resources the achievement motive finds satisfaction in appearances. Appearances take many forms. Great effort is put into keeping the external examination system running smoothly even though most people running it know by now that it is basically faulty. There is a hesitance to open the whole thing up for general discussion because this would constitute admission that it has been partially a fraud for many years; appearances must be respected, and so examination reform falters. Or, an organization with a dynamic set of purposes difficult to achieve falls back on what might be called "symbols of progress". These symbols take the form of carefully organized seminars inaugurated by highlevel officials, handsome publications which say little that is new, and frequently launched new projects for which too little is done to lay the groundwork or plan the follow-up necessary for success. In these illustrations the value of excellence is taking forms which get in the way of realistic analysis of problems and the careful planning that is required to make some progress on them. At least the effort that goes into appearances seems to be wasted, except to provide an outlet for the drive for excellence which remains a part of the culture.

Another value that stems from the feudal way of life is *depen-*

dence on authority. The hierarchical-authority system makes it necesary for each person to look to higher authority for everything he does. He is dependent on someone else to make the decisions; he obeys orders and carries out his duties according to directives from above. The implications of this deeply rooted value are many. In the first place, few people take personal responsibility for needed action or to suggest to their superior what should be done. A great deal of complaining goes on about the things that should be changed, but little initiative is taken by the hundreds and hundreds of middle-level administrators of projects until orders come from above. This slows down the whole process of implementation. It also robs the decision-making process of the ideas that could come from middle- and lower-level workers who know the problems more intimately than do the administrators at the top. Very often superior officers make decisions because they know they are supposed to; that is their job, but they are so far from the situation in which their decisions are to take effect that they are often not the right decisions. The hierarchical system is most discouraging of the very initiative and creativity desperately needed to bring a qualitative character into development projects and administration generally. It represents a set of values which are outdated in a country trying to become modern in its purposes and procedures.

Effects of the authoritarian-hierarchical system on government workers' concepts of their job is illustrated by the following story:

A few years ago an American educational advisor in India was asked to go to a neighbouring country to give a series of lectures at a conference. His responsibilities in India were heavy but he agreed to make a quick trip. He arrived at the airport in the neighbouring country, was met and taken immediately to the Foreign Registration Bureau. His passport was taken by the man in charge and sent to another office for a residence permit. The American pointed out that he was leaving the country in two days and he wanted to be sure to get his passport back in time. The official assured him it would be ready the next day. The American settled in the home of a friend, prepared to give his lectures, and on the next day between sessions at the conference, he stopped in to get his passport. It was ready, he thanked the official, commented again on his departure the following day, and went back to the conference. The following day, after finishing his last lecture, he was rushed to the airport, into customs and to the desk where his passport was to be examined. While the inspector was leafing through the passport the American glanced at his watch only 30 minutes before take-off time. The inspector

looked up and said: "Sir, you don't seem to have an exit permit." "I didn't know I had to have one," was the reply. Of course he could not leave without it. The plane was asked to wait, he was rushed back into town to the same office and to the same man who took his passport the first day. The situation was explained, the office burst into unusual activity, and the exit permit was granted within ten minutes. As he was about to leave, the exasperated American said to the officer: "Why didn't you tell me when I was here two days ago that I would need an exit permit?" The answer seemed so obvious to the government official: "You didn't ask me!"

Other current values could be mentioned which seem contradictory to the needs of the times. The high respect given to white-collar jobs and the disrespect felt for many kinds of work with the hands, is one. The tendency to escape reality through fantasy is another. This takes the form of unrealistic planning, grand schemes and the setting of goals impossible of achievement. Happy acceptance of contradictions, living undisturbed with paradoxes, arguing both sides of a question—these are some of the evidences of escape from reality, and they represent values which may be comforting to individual psychological security, but discouraging of progress towards a better society. Cynicism seems to be another value which protects persons from responsibility and leads to insincere efforts to implement worthwhile projects.

The above illustrations should be enough to emphasize the point that planned economic and social development are impossible without accompanying changes in cultural values. Let us focus on education for a moment. In Incident A described above we can see the difficulties of the teacher who tries to change his method of teaching without an accompanying change in the educational purposes of the students, of the whole teacher-training programme. As long as the students know their success will be judged on the basis of ability systematically to memorize carefully pre-organized information, they should not be expected to cooperate with a change in method which endangers satisfaction of that criteria. The concept of education which supports continuation of discredited methods is a part of the culture. It rests on ingrained values that seem little affected by modern educational theory. To take another example, the teacher who is introduced to audio-visual devices in teaching may continue to use them whenever the extension coordinator or the inspector is present. Unless the use of these aids is thoroughly accepted in the value system

of the school, as well as by the teacher, he is likely to discontinue using them when supervision is absent. Or, he may continue to display pictures and charts on the classroom wall, seldom changing them, but make no meaningful use of them in teaching.

Another example is found in integrated social studies. Unless the students, the teacher, the educational authorities and the public are helped to understand and want the educational results possible through this subject, integrated social studies will either not last or will continue in their present corrupted, artificial form which is far removed from the original concept.

It is often said that, unfortunately, the examination system controls education so tightly that little improvement is possible until the examinations are changed. This is actually unfair; the fact of the matter is that the values of the educated classes determine the educational programme, including the examination system, and neither will change fundamentally until cultural values are altered. The tragedy is that not one seems to be working on this basic problem.

The possible implication that all current Indian values are wrong and should be changed is not intended. Certainly there are values currently operative which should be preserved, which will continue to serve the needs of individuals and of society. It is not our purpose to draw up two lists, one of good and one of bad values. Which values will continue, which will be modified, which will be discarded and which will be created anew, are decisions to be made in the process of change itself. The process is a highly complex one, with material changes, value changes and behavioural change influencing each other in a never-ending process of interaction. The point to be stressed here is simply that planning for significant improvements in any aspect of Indian life should involve concern for reconsideration of values.

Tradition May Support Change

The impatient reformer may want to change all of society overnight. He may see only the negative in traditional ways and feel that the perpetuation of the present way of life serves no purpose. There is little he can do to realize his desire, however, for social change is by its nature very slow. It can only be made less slow. Such a pessimistic view of the current culture can work against his best efforts, for it may cause him to overlook the

ways in which the present cultural system serves constructive purpose during a period of change, and to ignore customs and values which can definitely aid the introduction of innovations.

In the first place, a reasonable degree of stability is required as a setting for planned change. Organized programmes for development cannot function amid extreme social turmoil or political instability. Systematic planning of projects requires predictable patterns of activity and routine organizations through which to work, faulty as they may be. There must be an on-going, structured way of life within which to initiate change. Responsibilities of various individuals must be known; the methods of decision-making must be subject to analysis; the multiplicity of factors which give a society its cultural character must be amenable to consistent identification. These factors make it possible for the planner and agent of change to do their work with some assurance that their plans and procedures will be dependable. In the absence of the organized character which traditional practices and values give a society, a planned approach to change would be very difficult.

In the second place, the continuity of ways of living provided by tradition gives a needed psychological security to individuals caught up in changing times. Human beings need something dependable and familiar on which to lean while wrestling with new concepts and practices. They need to maintain a certain feeling of integrity, of position, of worthiness, of self-respect and dignity. Where the threat to the individual's way of life is too great, he tends to develop traits of insecurity—aggression, defensiveness, retaliation, and over-justification for the present situation and his personal behaviour; or he may become a misfit who is lost in his own culture.

In the third place, traditional institutions, individual practices and values often serve to facilitate change. For instance, the psychological and material security provided to young people by the joint family system has often provided needed support for young people who want to venture out for study abroad, to set up an independent business or to move to the city to take up professional work. This assumes, of course, that the new endeavour of the young person does not force a complete break with his family. Continuing family ties also make it possible for such venturesome young people to influence other members of the family.

The young innovator periodically visits his family and reports on his experience. He may encourage brothers or sisters to make a break with family tradition. Thus the extended family can become a multiplier of change.

Or, traditionally established leadership can serve to facilitate change. All societies have ways of identifying certain persons as informal leaders, persons to whom groups or communities look for guidance, to set the pattern, to say "yes" or "no" to new ideas. The existence of such patterns of leadership often makes it possible for a new idea or practice to get a hearing,.to be given a try-out, assuming that the leader can be convinced of the merit of the innovation or is willing to experiment with it. Without the role of traditional leadership it would be necessary to convince each and every individual separately that the innovation was worth trying.

Incident B is an illustration of the way in which a traditional custom can be used to support a new idea. The custom of *annadan*, and the value of charity underlying it, provided a ready-made vehicle for the collection of foodgrains and money for the midday lunch programme in schools. Similarly, in some Muslim countries, the Islamic duty to give alms (*zakat*) has been turned into organized financial support for social service programmes.

And finally, it must be recognized that traditional culture may possess qualities which should be and will be preserved. What these qualities are will vary from society to society. These worthwhile values or practices may need adjustment in keeping with changes taking place in related aspects of the culture. Or dead traditional values may need to be revived and revitalized. While it is generally recognized that Indian leaders (or scholars) should study Indian traditions in the light of development plans, they cannot decide which traditions should be preserved and which should be forgotten. They can and should use the knowledge gained from their study to raise the level of intelligence used in the reconsideration of values, but the acceptance or rejection of change must come from the people themselves. This process of reconsideration of values involves a complex of interactions between leaders and followers, between needs and resources, between old ways and new ideas, and between theory and experience. In guiding this complex process, the leader of improvement programmes should remember that: (2) *Traditional values, customs*

*and institutions, while subject to necessary change, provide for
order and predictability without which planned change would be
impossible; they give desired psychological security to persons
threatened by change, and they provide the vehicle for change
even while they themselves are undergoing alteration.*

Functional Nature of Culture

The culture of a people is not necessarily what someone thinks
it is, or thinks it has been, or thinks it should be, but what it
actually is in the day-to-day activities of the people. This defini-
tion of culture places the control of cultural continuity and change
squarely in the hands of all classes and sections of society.
(3) *Traditional values, and their associated institutions and practi-
ces, are perpetuated because they have functional worth to the peo-
ple of a society; it follows that change must prove its worth to
the people if it is to become an accepted part of life.* In other
words, the features of a culture are what the majority of people,
or large groups within the whole, have accepted as meaningful
for their lives. It follows, therefore, that changes in the culture
can be brought about only to the extent the people initiate or
accept the change and make it a part of their way of life; lasting
change must be meaningful and rewarding.

Motivation for change may come from several sources: the
emerging of new problems which urgently need solution, or de-
velopment of a new consciousness of old problems; contact with
other ways of life; informational and educational programmes
designed by agents of change to promote particular projects; the
recommendations of respected leaders and scholars; innovations
already accepted which encourage or make necessary additional
change; demonstration of new devices, tools or ways of working
which seem to be an improvement on those currently in use;
major changes in the environment such as the opening of a new
canal and pressure from government through legislation or ad-
ministrative regulations which enforce new requirements or
procedures, or promote new programmes. Whatever the motiva-
tion for change may be, significant and lasting change will result
only when the new idea, method or practice is accepted by the
people as a meaningful addition or substitution. The culture
cannot be changed by decisions at top levels of government alone;
it cannot be legislated, it cannot be forced. Government action

may be one of the influences on the acceptance of innovations, but it does not constitute change in and of itself. Involvement in and acceptance of change must have a broad base among the population.

Furthermore, acceptance of a new idea depends on its functional utility in a variety of senses. People cling to traditional ways because they provide emotional satisfaction as well as meet practical needs—because they lend integrity to personality, provide for acceptance and identification for the individual and a feeling of psychological safety. New ideas may be rejected if they threaten the psychologically functional cultural factors even though the new idea is clearly preferable for practical reasons. For instance, good teachers in India are identified and rewarded by society in terms of the percentage of their students who pass the external examination. They hesitate to accept new methods and purposes of teaching which, even though the validity of the new methods and purposes are recognized, pose a threat to the results which afford the teachers emotional and psychological satisfaction.

Also the old way of doing something may be valued not so much for its obvious purpose but because it serves a number of secondary purposes. The new way may appear to serve the obvious function more adequately but it may not contribute at all to the other purposes felt to be important; as a result the new idea is rejected. For instance, villagers in several countries have hesitated to use piped water systems, not because the new system did not provide a more adequate and more healthy water supply, but because the open well provided a social function for the wives and daughters who carried the water. The new system did not serve this secondary purpose and hence was not accepted. In another case a Middle East government accepted assistance from a European country to build a grain silo with an accompanying bakery to make a loaf type of bread to replace the flat, unleavened *nan*. Acceptance of the new type of bread, which may have been healthier in some ways, was slow, partly because its taste was different, but also because the loaf bread could not be folded and used as a spoon as was the custom with the flat *nan*. In Indian education, the system of private tuitions makes it difficult for teachers to spare time to work on school development projects. Any new effort to improve the school may be rejected by

teachers, not because they are not in favour of the suggested innovations, but because accepting them would pose a threat to the supplementary income provided by private tuitions.

The story is told of the housewife who had difficulty adjusting to one of the technological innovations of modern times. Her husband had always shaved with a straight razor. He usually shaved after breakfast and the event became something of a family ritual. She would lay out the equipment, get a supply of hot water, and prepare to talk to him while he shaved. It was a quiet time of the day, before either one got involved in their many activities, and the wife came to depend emotionally and practically on this uninterrupted time to talk to her husband. He was busy with the delicate task of maneuvering the "sharp instrument, and he seldom said much except to grunt a "yes" or "no". The wife would talk about her plans for the day, ask a few questions about his plans, pass on a little community gossip, and in the course of the conversation she would ask for money to meet the household needs and her own personal wants. The husband usually agreed and this sensitive problem was handled with ease. In due course the husband purchased an electric shaver. Now he comes into the bedroom after breakfast, plugs in the new electric device and shaves away amid the humming noise that makes conversation impossible. The wife is upset with this disruption of her routine. She not only misses the happy, homey chance to chat with her husband each morning, she also has a very crucial problem: When does she ask for money now?

The following illustration from the field of village development will point up this problem in another setting.

INCIDENT C

Scientists developed a gas plant for cooking in the village. It reduces the drudgery connected with the usual chula, and it is fairly inexpensive to make. It uses cow dung to produce a gas which burns for cooking or for lighting the room. In the process the cowdung is "digested" into a form that is odourless, repellent to flies, and increased in value as a fertilizer. This very useful innovation seems like the answer to a prayer for the Indian village.

This gas plant was introduced into a block of villages by installing it free in the homes of a number of people who volunteered to try it. It was announced that other people who saw the plant operate and wanted one for their own homes could buy them at a subsidized price. Only a few

did so, and after several years the innovation had spread to a very small number of additional homes, and some of the families who had accepted the gas plant free on a trial basis had discontinued using it. The block leaders who had introduced this new, promising device were baffled.

It was decided that a team of social scientists should make a study to find out why the gas plants were not popular. They interviewed those who continued to use the plant, those who had discontinued using it, and those who had not attempted to make the change. They found that the new device required an alteration of the usual pattern of cooking which the villagers could not easily make. The housewife in these villages not only tends to the cooking and the keeping of the house; she also works in the fields. Normally, before going to the field in the morning, she would light fires in several *chulas*: one for heating milk, one for cooking *dal*, one for cooking fodder for the cows, one for tea water, and maybe one for bathing water. While she was working in the field the slowburning *chulas* were doing their work. When she and her family came in from the field work it was an easy task to finish preparing the meal, by making *rotis*, feed the cows, and bathe. The milk was ready to be put away for making curds or ghee. The new gas plant did not fit this schedule as it had to be lit and used immediately; it could not be left alone for a long period of time. Also, while the cost of one unit was reasonable for a villager, to buy several to serve the various functions was beyond his means. And finally, the amount of cowdung required by several gas plants exceeded the normal supply.

In the incident described above, a good idea was not accepted because it was not truly functional in the situation in which it was to be used. It did not serve all the purposes which custom demanded of it, so the gas plant in spite of its obvious advantages was rejected in favour of the time-worn *chula*. The agent of change must recognize that cultural patterns are both preserved and changed by the people in terms of what satisfies their own feelings of need. In the long run, changes to be brought about in the Indian way of living will be decided by the people generally; they will choose among the many alternatives what they consider to be most worthwhile. If they are not given a chance to choose, if changes are forced on them by government pressure, then the innovations will be resisted, accepted in form, but not really made a part of actual patterns of living. This may be one of the reasons why literacy programmes have been so slow to take root —there is no need for literacy felt by village people, and they get no benefit from it.

Change Grows out of Tradition

Life goes on, it perpetuates itself. Changes occur but they are gradual, piecemeal, incidental. Within a generation the significant elements which change in a society are far outnumbered by those which do not change. The process may be slow, slower in some societies than others, but it is continuous. It is also contiguous. Each change grows out of the situation before it, and it contributes to changes that follow.

Our problem in this book, however, is how to speed up change through the conscious, planned promotion of innovations. Should we, then, look for some way of short-cutting the process? The temptation to look for a magic wand is great. The pressures for progress are immense. The goals of development of any underdeveloped country are challenging. Many underprivileged people are now knowledgeable about the way advanced peoples live, and they are envious. They want to have all the fruits of science and technology and to have them now. They are impatient with the evolutionary process, they want to make a break with the past and jump into modernization. With Attatürk, they want their country to catch up with the Western world in a generation. Perhaps in the early years after World War II it was hoped that magic wands would be found, or that cooperative technical assistance itself constituted such a miraculous device. An honest evaluation indicates that progress is being made but that the early hopes of revolutionary change were unrealistic. We are now more mature and more sober; we have learned from experience and disillusionment. We now know that change is more evolutionary than revolutionary, and that the task of promotors of change is to use all that is known about the process to speed it up and to improve its quality. Much can be done along this line, as this book suggests, but the basic process remains.

Social scientists give us a number of models of how change takes place. One model sees all societies in a constant state of tension. The tension is produced by forces for change opposing forces for stability. During most periods the forces are in relative balance, but since the tendency for change is a fundamental factor in human affairs, the forces that encourage innovation win out in the long run, and change occurs. During the aftermath of periods of relatively rapid change, because of the cultural alterations that have occurred, the forces are disrupted and a period of ...

consolidation and regrouping takes place. In this model of the change process, the task of promoting more rapid change is quite clear; the forces for change must be identified and strengthened and the forces supporting conservatism must be identified and weakened. This will lead to more rapid and more prolonged periods of change and progress.

Another model of change is that of problem-solving. Every group of people encounter problems that keep them from satisfying their needs and achieving their goals. They come to understand these problems, and they plan ways of solving them. They may try one or more ways of eliminating the block to a more happy life and eventually they find an answer, or answers, which are partially satisfying. They then move on to other problems, or wait until other major problems come along. This model of change calls for increasing the skill of the society in solving problems. This includes increasing their perception of problems, improving their tools and methods of analysing problem situations, encouraging creative invention of possible solutions, better training in planning and carrying out plans for the solution of problems, and developing techniques and skills of evaluating results and interpreting the results in terms of the solutions sought.

Another model of the process of change is that it takes place as the result of contacts with different cultures. People of differing societies meet, see something of how the other lives, get ideas that look attractive and that seem to make sense at home, take them home and try them. The likelihood of the successful transplant is increased if the borrowed idea is reinterpreted or adapted so that it fits the receiving culture. If this is successful the borrowed item becomes a part of the culture and change has occurred. The obvious way to speed up this process is to increase the quantity and quality of cross-cultural contacts and provide assistance on interpreting and adapting borrowed ideas so that they serve best the needs of the receiving society.

Still another model is that change takes place on an irregular front. It takes place much more rapidly in some parts of the culture than in others. Some institutions or groups take the lead. Cities often develop faster than rural areas. Some sub-cultural groups are more prone to the new ideas and they move out front. These more rapidly developing elements serve as an "opening wedge", they "pave the way" for others to follow, and they can

be viewed as experiments to be studied, evaluated and their experience made known for others to emulate, or to reject. In this model of change the task of the agent who would speed up the process is also clear: he should identify those elements which are more prone to change or which are already ahead of other elements, stimulate their tendencies in promising directions and give them assistance. He should also encourage communication between the leading elements and their potential followers so that the latter learn from the former. In this process social approval can be given to the behaviour of the innovating groups to encourage imitation of their progress.

Other models of change could be described. In all of them there is a common principle: (4) *Change should be viewed more as development from within tradition than as a "break with the past"; careful planning for change, therefore, requires thorough analysis and understanding both of traditional culture and of proposed innovations and of predictable interaction between the two.* The following incident is an illustration of what can happen if this principle is neglected.

INCIDENT D

A few years ago, special officers of the Department of Public Instruction were given the task of establishing schools in the tribal areas of a State. The government had been feeling guilty over the neglect of the tribal areas. It was decided they should have schools. They should not only have schools, they should have schools identical to all other government schools, with the same curriculum, the same textbooks, the same schedule, the same kind of building, the same programme of activities, and the same student uniform. The tribal areas were to have the best.

It was recognized that some of the tribes might resist the establishment of government schools in their area. They had a reputation for resisting all government programmes intended for their benefit. Of course, they would change their minds once the schools were established. So the schools were to be established with full government backing. The Public Works Department moved into the area and put up the schools. Teachers were assigned for each school. The schools were inaugurated in many places by the Governor, or some other high government official served to lend authority and dignity to the occasion. The police were helpful in enforcing attendance. All this backing was given to the Tribal Education Officers to ensure success. They did what they could to explain the school to the tribal people and encourage their cooperation.

One Tribal Education Officer had misgivings about the project. He was trained in sociology and was sincerely interested in the life of the

tribal people. He was hesitant about forcing a school on them. Nevertheless, he cooperated with the plan of the Department. The people of one particular tribe in his area were unusually hesitant about sending their children to the new school. He spent quite some time with the leaders of the tribe seeking their cooperation. They did not say much but it was clear they were not convinced. The number of students gradually increased, however. Some of the leaders came to the school and observed from a distance. They made a few suggestions to the Tribal Education Officer for changes in the school schedule, and particularly for exemption from providing the required school uniform. The Tribal Education Officer could make no decision on the matters himself but he agreed to seek permission from the Department for such variations. Answers to his requests were slow in coming, and negative. The plan had been developed at the State level; it could not be changed at the local level.

One day, on his visit to this particular tribe, the Education Officer found the school burned to the ground. He was at first very angry, and apprehensive that he would be held responsible. He was also baffled as to who had done it, and why. He made inquiries but learned nothing. The teachers could not help him.

Then he began to wonder. He decided to investigate the situation more deeply. With his sociological training to guide him, he decided to make an indirect approach. He decided to start with the people with whom he had already established some rapport. He asked about tribal customs, about methods of choosing leaders, about how the children were taught different skills, what they were taught in their homes about tribal affairs. In time he learned very much; and he knew why the school had been burned down. This tribe had a very well developed system of educating their children in the ways of the tribe. It was complete with organized study, special dress, ceremonies at different stages, and educational games. This system was very dear to them, it was very old, and very jealously guarded. They found they could not find time to continue their system when the children had to attend the new government school. They resented the school uniform which was not at all what they thought children should wear in school. Furthermore, what was taught did not in any way educate the children to be good tribal citizens. The school was incomprehensible to them, and it was a challenge to their way of life. Burning down the school building was their only alternative.

The incident described above speaks for itself. In time, the government policy towards tribal education was modified, but not until considerable damage was done. It would appear that the attempt to establish typical government schools in tribal areas is a clear case of repeating the error the British are so strongly condemned for by Indian leaders. They were trying to foster an alien school system on the tribal people, and through neglect and competition to kill off the indigenous system which served their

needs. They were trying to impose a "break with the past".

Unfortunately, the British-imposed school system was not adequately modified to serve Indian culture, nor was it intended to, and with the support of the British rulers it became thoroughly established. Attractive and prestigeous employment in the administrative services for those who succeeded helped to make it popular, and the many upper class Indians who were sent to England for study helped to establish the British pattern as the model of good education among the ruling classes. It exists today pretty much as an artificial institution for the majority of cultural groups in the country, unrelated and unresponsive to the basic culture, and contributing little to orderly change and development of that culture. When independence came the new leaders of the country knew what was wrong, but it was too late. Western type schools had become so thoroughly entrenched they could not be budged. Even the closest followers of Mahatma Gandhi would not send their children to the Basic Schools which he proposed as an Indian answer to the development needs of the country.

If one appreciates the fact that meaningful change should be built on and emerge from current culture, a new role of education is suggested. It means, in the first place, that the purposes, content and methods of the school curriculum should be built around the problems and objectives of social and cultural change. It means, in the second place, that a significant degree of flexibility is needed in educational planning so that meaningful communication between the school and the culture of the communities they serve is assured. This would mean that significant variations should be evident among schools for the city of Calcutta, the agricultural areas of the Punjab, the villages of Uttar Pradesh and the hills of the Himalayas, to mention only one of the several dimensions of cultural variation. Of course the common elements of all good educational programmes should not be neglected; nor should the needs of building a more effective national unity. It is a question of taking account of all three in proper balance.

Basic Education might have made a contribution if it had succeeded. The community-school concept may be very useful for rural areas; but neither will serve the purpose if they also are turned into inflexible, meaningless formulæ, administered b⋯

bureaucrats unable to nurse the schools along in terms of their true purpose, rather than in terms of directives from above. The need is not just for a different concept of education and different kinds of schools to fulfil that concept; the need is even greater for a philosophy and psychology of administration of education that allows for flexibility and creativity at the local level, and for local administrators able and willing to use their responsibility imaginatively and effectively. This major problem is treated in greater detail in Chapter V. Here it is appropriate to mention that in the training of educational planners and administrators, as in the education of all leaders of Indian development, there should be a larger element of study of culture change, of Indian culture, and of development plans. Such study should be approached through sociology, anthropology, history, social psychology, and through economics. Such study should not be theoretical only; it should include a significant amount of field experience. Not only change theories should be studied, but also change programmes. Not only classical Indian culture should be studied, but also the culture as it is now lived, in all its variations from the streets of Madras, Bombay or Calcutta, to the villages of Central India, to the wealthy homes of Delhi. Not only economic theory should be studied but also the economic problems of the Five Year Plans. Such content should be included in the curriculum for more students at the college and postgraduate levels, and it should find its way appropriately into the common curriculum at the secondary level, and even at the primary level. The unprecedented attention being given to science education in recent years should not stand in the way of more adequate attention to the critical role of the social sciences in education for a developing people.

Institutionalized Change Mechanisms

Another model of the process of change not mentioned above is the idea that: (5) *Mechanisms and procedures for introducing, accepting and assimilating change are present in every culture; they vary in sophistication among cultures with resulting variations in speed and quality of change; variations in rapidity and kind of change also occur from one historical period to another in the same culture.* In this model, the task of the promotor of change is to identify the change mechanisms and procedures that

have served the culture during its periods of most rapid progress and see whether or not they might be stimulated or revived to serve the development needs of today. It may also be necessary to invent new procedures and mechanisms where those from the past are judged to be inappropriate, or where there are formidable obstacles to reviving them.

A good example of such procedures for change is found in traditional Islam. Change and growth were provided for through the doctrines of *ijma* (consensus of the educated leaders of each community), analogical deduction from the principles of the Koran and Hadith, and *ijtihad* (individual and independent interpretation). Application of these doctrines led to the creation of procedures throughout the spreading Islamic Empire for growth and adaptation to varying conditions and problems. These procedures were responsible in part for the maintenance of vitality and validity in the Muslim way of life over a wide section of the world and for its growth as the leading civilization of the time. Starting in the eleventh century, however, orthodoxy began to set in, *ijtihad* became more and more limited until the exercise of individual interpretation was entirely prohibited. This marked the decline of Islamic civilization which has not fully recovered even today. In recent years some Middle Eastern countries have attempted to revive these creative doctrines by giving them appropriate modern form, with limited success.

Hindu culture has also had built-in mechanisms and procedures conducive to innovation and change. For instance, Hindu pundits had the authority to reinterpret scriptures in the light of new events. This made it possible to depart from traditional ways without being ostracised. Swami Dayanand Saraswati used this provision in establishing the Arya Samaj movement. He said he was not forsaking Hinduism, he was only reinterpreting it. Many other splinter groups were started this way, with resulting alterations in their way of life. Along the same line, any preacher of a new doctrine, if he was convincing and commanded a following, was accepted for official listing among the incarnations (*avatar*) of God. Budha was so accepted, even though the way of life he preached was a major reformation of orthodox Hinduism as then practiced. The allowance of *apadharma*, the giving up of traditional requirements, during a period of crisis in the life of a group or of an individual, made possible group and indivi-

dual departures from orthodoxy. Another device that provided a loophole was the doctrine that anything done in the presence of God was acceptable. In Puri, for instance, the practice of high-caste Hindus eating with untouchables has been going on for generations, but it is done in the presence of the proper god. Even today in Tirupathi marriages are solemnised during periods when they are normally banned, but such marriages are performed in the temple.

These and other devices have made it possible for Hindu culture to change and grow, to accommodate itself to changing forces and tendencies of the people. Some of these practices continue today; whether or not they are appropriate mechanisms of change in terms of India's development plans is a question. They were effective in a setting where all matters—social, economic, political, personal—were a part of religion. Can they be encouraged by a government committed to separation of religion from politics? Perhaps so, if more recognition is given to voluntary, non-official agencies of cultural change. Certainly Mahatma Gandhi made use of them in influencing the masses to follow his revolutionary path.

Another major influence throughout Indian history has been invasions of the sub-continent from the north and from the sea. These invasions brought in major new cultural elements, and through consolidation, synthesis and reformulation, the composite culture of India became more and more complex. The Hindu emphasis on tolerance and synthesis may have been one of the major accommodations to this process. Proselytizing, through force and through missionary activity, has been another means of bringing in new strains. Perhaps both, invasion and proselytizing, carried on by peaceful means, are still effective ways of bringing about growth and development. The modern counterpart seems to be the many technical assistance programmes of recent years, organized by many countries and international organizations to help each country benefit from scientific, technological and cultural advance in other countries. India has been both a major beneficiary of such programmes as well as a source of aid to some other countries, and one of their effects has been continuation of the age-old process of change.

The major force for reform today is government. Through the Five Year Plans and their many projects, the government is at-

tempting major innovations in all aspects of Indian life. Within government efforts, the project and the scheme are the principal mechanisms for planning and organizing major programmes. Another, related, procedure is to establish a bureau, an institute or a council, and to charge it with responsibility for creative work in a problem area such as health, population control or education. Still another device is the *ad hoc* study group, committees or commission. All of these could be more effective than they are if they were more realistic in their planning and if their recommendations were taken seriously. Their reports are often read only by a few officials, filed and forgotten. Still another mechanism is the agent of change who has no official authority and no set programme to carry out. He acts as a catalyst to stimulate, lubricate, assist and improve the established methods and procedures of work.

The agent of change will be discussed in detail in Chapter VI; we mention him here because he is one of the many government forces about which we want to make a point and raise questions. A number of values dominate government operations and government-citizen relationships which cause one to wonder about the current heavy reliance put on government efforts for development. There are the authoritarian-hierarchical values discussed above. There is a hesitance to take personal responsibility, with resultant "passing of the buck". There is the attitude of distrust towards government developed through centuries of foreign rule which takes the form of considerable skill in circumventing government regulations; and there are the traditions of the administrative service which emphasize efficiency and routine over creativity and flexibility. Putting all these together can lead to the conclusion that government development programmes are not likely to get very far in breaking new ground, in bringing about qualitative change in the nature of Indian life. One could be more optimistic if progress were being made to modify these values, but they are very deep-seated and they continue to serve the private purposes of individuals and groups. It would be another thing if change and development were the kinds of objectives which could be neatly packaged and fed into the top of the bureaucratic machine and led through channels to the spot where they were to be opened and used. They are not; they are the kinds of objectives that require the best of creative imagination at all levels of

society, the most responsive of human relationships up and down the ladder, a sense of purpose and commitment among leaders and followers throughout the society and flexibility to meet the varying needs and conditions of the many groups among a multicultural people. Questioning the ability of government programmes, controlled as they are in their administration by a set of values bound to frustrate their purposes, leads to the question whether or not the proper amount of encouragement is being given to non-government agencies, individual independent action, and private cooperation. Government itself has recognized this problem by setting up autonomous or semi-autonomous agencies to work on new programmes. The National Council for Educational Research and Training is one such agency, and the Small Industry Extension Training Institute is another. Such agencies tend, unfortunately, to be dominated by the Ministry which created them, thus seriously limiting the autonomy intended, and they are staffed largely, by persons from government service who bring their values, attitudes and habits with them. Some agents of change, such as extension coordinators for secondary schools, have in many cases found they are not comfortable outside the authoritative patterns of government operations, and have fallen back into the familiar ways of bureaucracy.

It is a known fact that some of the poorest schools in India are private schools. It is also a known fact that the best schools in India are private, and that in some of the states where private schools are predominant in number the best job of educating is being done. Probably the most important factor in building a good school is consistent leadership of persons who care, who take a deep and personal interest in the progress of the school. It is hard to find such persons in government institutions. Ways of enforcing minimum standards should be devised to reduce the number of private schools of extremely low quality, but private schools as such should not be discouraged. More should be done through effective control of the circumstances under which new schools are opened, and better supervision of private schools may be required. This assumes a kind of supervision that does not stifle the initiative individual persons or groups may have to build something they want to build.

We do not want to suggest that nothing can be done to improve government programmes or institutions. We want only to suggest

that, studying the history of change in a variety of cultures, it is found that a large part has been played by numerous internal mechanisms and procedures, many of which are personal and private, and result from voluntary group action. Of course, in many cases there have been social devices for preventing such efforts from infringing on the common good, and in the context of India this supervisory role should probably belong to government. But the basic question is whether or not the proper amount of encouragement, freedom and support is being given to non-government agencies; such agencies may be less limited by traditional bureaucratic values so damaging to government development programmes.

Change through Borrowing

Much of the early effort for international cooperation for development, starting after World War II, was based on the assumption that technical know-how, scientific ways of thinking and "modern" ways of living could easily be transplanted to many parts of the world. Experience indicates otherwise. Innumerable examples could be cited from agriculture, community development, health, industry, administration, education and other areas of development to show that practices found to be useful in one culture are not necessarily appropriate in another culture. Indian education has borrowed many ideas and practices which have proved to require considerable adaptation. Social studies, audiovisual aids, science laboratories, cumulative record cards, student government, school libraries, television, and many other importations have not taken real root because they are far from appropriate in the form in which they were introduced, or were totally inappropriate at the time they were introduced. Currently there is discussion of trying programmed instruction and team teaching. Even where such imported practices are theoretically appropriate and obviously needed they may be rejected because the people expected to use them do not understand or appreciate their purpose, are not emotionally committed to them, and because the new practices do not fit properly into the overall culture.

Difficult as it may be to incorporate ideas and practices from one culture in another, it is often desirable to make the attempt, provided the task is approached properly. (7) *Successful transfer of ideas and practices from other cultures depends on careful*

timing, adaptation to local conditions and needs, thorough integration with the customs and values of the society, and meaningful involvement of indigenous creative effort in planning for their use. In this approach readiness plays a very important role. Factors of timing and readiness will be discussed in greater detail in the next chapter. Several other factors may be discussed here.

In the first place, ideas and practices from another culture are more easily integrated when they are as "culturefree" as possible, when the innovation has been stripped as much as possible of the associated habits, values and practices which normally accompany the innovation in its native cultural setting. The concept of guidance may be more readily integrated into the educational system of India if it is introduced without the same types of tests, cumulative record forms, and guidance staff peculiar to guidance services in American education or in the educational system of some other country. Guidance is definitely needed in Indian schools, but the development of the concept in Indian terms may result in quite a different set of implementing tools and procedures.

In the second place, acceptance and integration of ideas from other cultures may be hastened by associating them closely with accepted roles and practices. For instance, innovations in medicine may be more readily and thoroughly accepted if they are introduced in close association with folk medicine workers and midwives. In fact, wherever possible the new idea should be introduced by a person or persons who are members of the receiving group and who are respected for the service they are already performing. In this way the innovation appears less threatening, it comes to the group in familiar forms, introduced by their own people. A facilitating role can be played by group leaders who accept the innovation and promote it. They are close to the people and can take into account personality factors, relationships among individuals, local idiosyncrasies and current concerns. They may know better how the imported idea can be presented.

In the third place, ideas from other cultures may make their contribution more effectively as supplements than as fundamental reform. They depend for their validity on innovation and experimentation within the receiving culture. New seeds sown on infertile ground have little opportunity to germinate and survive. Imported ideas and practices from other countries have little change of being meaningfully used unless they are introduced into

an active rethinking of culture. This places the main responsibility for development on the creative rather than the eclectic function, more on the leadership personnel and the intellectuals of a country than on foreign advisors. Too many developing countries have put more effort into searching out good ideas from other cultures than on the demanding task of creative rethinking and revaluation of cultural traditions, and on local problem solving. To accomplish this creative role the best minds of the country should become actively engaged with the problems that exist throughout the various levels and aspects of the culture. The education and training of leaders should equip them for rethinking and reconstructing traditional values. They should know the minds and hearts of their people, thoroughly understand what motivates them and what causes their apathy. They should be at work on thinking out the desirable direction cultural change should follow. They should see their task more as one of working from within, to recreate, revive and renovate, rather than of applying ideas, schemes and plans from outside. The results of such an approach should increase the chances that borrowed concepts and practices will find a setting within which to get a hearing, to be meaningfully integrated, and to make a real contribution.

One possible negative result of the failure creatively to adapt the borrowed ideas is that the borrowed ideas fail to survive. Another possible negative result, and possibly a more limiting one for integrated development, is that the imported ideas, institutions, values, techniques or ways of living become established on false premises and serve to block meaningful change. By "false premises" it is meant that the purposes, supporting values and rewards from the established innovation are effectively unrelated to the basic culture and problems of the country. The Indian educational system is a good example of such an artificial phenomenon. It was developed by the British largely to serve their needs in administering India and was based on the British concept of education at that time. A concomitant development in the country was the emerging of a set of values that were pseudo-Western, a concept of education as a means to liberation from work and responsibility, and a system of employment, status and security which catered to and could be manipulated by the educated elite. The system became, thus, self-perpetuating and entrenched. Since 1947 many words have been written and spoken calling for a revolu-

tion in the educational system to meet the needs of the new, independent, developing country. Except for Mahatma Gandhi's concept of Basic Education, few creative ideas have come forth on which to base the needed revolution, and Basic Education has been accepted in name only, for the most part, due to lack of preparation of teachers, because it became a political matter rather than an educational matter, and because the degree to which the British system had become entrenched was underestimated. Since Independence many other ideas have been injected into the system, most of them borrowed from the United States. This has resulted in much tinkering with form and organization, but the institution continues to function with too little essential change. Indian educators today continue to try various approaches, projects and plans to improve the system. Many of these efforts may produce results in the long run; but the deeper need is for more effort on creating an indigenous philosophy of education, on developing curriculum content and methods of teaching which are rooted in and which effectively come to grips with traditional culture and its need for meaningful change, and on recognition of Indian patterns of child growth and development and Indian psychology.

Just as institutions borrowed from outside find difficulty in getting rooted in a different culture, individual people who speedily take on the outward culture of another way of life find it difficult to maintain a basic source of inspiration, values and social philosophy. They are unable to absorb the depth of the adopted heritage in a short time, and they tend to lose faith in their own heritage; hence they become rootless and lacking in motivation and purpose. Looking at India today it may be fair to say that the individuals most intelligently and purposefully motivated are from among those who are most deeply and understandingly imbued with traditional values, who are fully the products of the culture, yet who have somehow been able to break free from the shackles of orthodoxy and to do creative thinking within this culture. Such persons know, understand and feel out of the traditional matrix, yet they are able to see problems, recognize alternatives and think in terms of the values which have been lost and the directions in which cultural innovation should go. They are more able to evaluate, select and adapt those ideas and practices from other cultures which will make a lasting

of local culture. Such people are too few in number and, maybe, becoming more scarce.

In spite of the many problems of cross-cultural transfer, social scientists suggest that contact with other cultures is one of the major stimulants to change. Living for a period in another country, study abroad, visits to metropolitan centres by rural people, contact with individuals from other cultures and communications media showing life in another kind of society, all provide motivation for change. Contact with a new practice, discussion with people with different ideas and values, seeing a different way of life or actually living in and adopting the ways of a different culture for a time may have a profound effect on individual persons. They may come to realize that life can be different and still be satisfying, they may begin to question the "rightness" of all aspects of their way of life, their minds may be stimulated to wander from traditional patterns, they may come to see new problems and develop new needs and desires.

Anthropologists tell us that borrowing has been and remains a major method of social change. Perhaps a distinction should be recognized between voluntary borrowing and the promotion of borrowing. Throughout history people have learned from each other through travel, exchange of literature, trade, and other more or less natural, uncoerced means of intercommunication. In these activities factors of timing, readiness, adaptation and creativity are automatically built in. New ideas and customs new to a people are accepted, modified or rejected in terms of their attractiveness and utility. The process is a normal part of day-to-day living.

When borrowing is promoted, however, the situation takes on a different character. The initiative shifts from the people to the promotors. No longer are factors of readiness, appropriateness and utility naturally taken into account. The promotors' purposes enter the picture, the needs of the country are brought in. Politics gets into the picture—these and other factors disturb the normal process. This is not to argue against promotion of change, but it should be done with full understanding of what is involved and with methods which reflect this understanding.

Supplementation versus Substitution

While encouraging appropriate borrowing and adapting of ideas from other cultures, it is important to realize that acceptance or

rejection of an innovation depends on the amount of individual and group adjustment required. (6) *Innovations which are intended to replace existing practices, institutions or values, are likely to be more slowly accepted than innovations which are additions to the culture or merely variations of current ways.* In Incident D described above, the tribal group were frightened by the establishment of the government school partly because it threatened to replace something they held very dear. It was an almost total substitution for the tribal system of enculturating and training their children. If it had been possible to operate both systems side by side the threat would have been less, and, in time, if the government school proved to be a satisfactory substitute (which it probably would not have, for obvious reasons) the tribal system would have faded away, gradually. Or, if a careful study of the tribal system had been made and plans developed to introduce into it some of the elements of the government school programme, such as the teaching of Indian history, a gradual change might have been accepted, if carefully handled.

Educators are familiar with the common phenomenon in curriculum revision work: it is relatively easy to introduce a new course and get it accepted among the staff and students; but it is another matter to introduce a substitute. To introduce a substitute it is necessary to take the position, openly or by implication, that the present course is faulty or inferior, or of dubious worth. To say this is to invite defensive reaction. A teacher, one or more, has a vested interest in the old course. Parents have come to count on it; the new course may or may not be equally recognized by the university admissions office. And, of course, equipment and supplies for the existing course are already available. What will be done with them after the change, and will needed provisions be available for the new course? These and many other questions have to be satisfied in making a substitution. Simply to add another course raises far fewer problems, and so it has been the all too common method of curriculum revision. In time the old course may lose its popularity and its allegiances, and the substitution will be accomplished without all the difficulty attendant on substitution.

In examination reform it has been found impossible to introduce a wholly new system to replace the present one, in spite of

the advice of many who feel the examination system is the major block to educational reform and that it should be promptly abolished. Others who agree on the influence of the current system recognize that a total substitution would be unacceptable to the many people who have a vested interest in things as they are. Also, the skills and knowledge required to organize a totally new programme are not available. The wiser approach is being followed; a phase programme has been planned that makes use of addition, supplementation and gradual replacement of the undesirable elements in the system, and experience with each step is being carefully evaluated, in some States.

Supplementation in place of substitution is a particularly desirable approach where deep-rooted values and emotions are concerned. In areas where modern medicine is introduced for the first time it would not be practicable to require persons to give up their unscientific religious or superstitious beliefs and practices before they are allowed to have inoculations. Values and customs cannot be changed overnight, particularly when they are based more on emotions such as fear than on reason. So many people, in areas where new medical techniques are being used for the first time, perform rituals to placate the evil spirits in the morning and get their inoculations in the afternoon. In time, with adequate education, the superstitious customs will disappear. This is clearly a case where change in practice may precede change in value.

Perhaps this principle is applicable to the teaching of English in India. Recent programmes for improving teaching have relied on an almost total change in method, from the translation method to the "structural approach". Success has not been phenomenal because teachers do not fully understand the change, the new approach does not satisfy the old purposes, and the new skills required are not easy to learn. It might have been better to devise a reformed curriculum with methods that supplemented and varied the old methods rather than replaced them.

It seems desirable to enter a caveat at this point. Indian culture, as has been mentioned before, encourages eclecticism. It also tends strongly to accommodate the existence of contradictions. If the end-purpose of the addition or variation is achieved without significantly altering or replacing an element, then there may be nothing to worry about. But if the intended long-range goal can be accomplished only when a current part of the culture is sub-

stantially changed or replaced, mere addition may not accomplish much. Examples may be given from education. There have been suggestions in many states to add health education to the curriculum; or, in other cases, citizenship education has been added as a separate subject and given one or two periods a week. The long-range objective in these cases may be the substantial reorganization of the teaching of science and social studies. If these two subjects are taught as they should be, both health and citizenship objectives would be accomplished. Neither can be taught effectively except as a part of the discipline which provides the basic concepts and information required. To add either health education or citizenship training as separate items may give the appearance of having met the need, and satisfaction with this innovation may stand in the way of the more fundamental task that should be accomplished in the long run. The same might be said for science clubs. The addition of a science club, if it is truly effective, may provide experiences that directly contradict what is done in science classes. In the club the students get the idea that science is experimentation, that it is exploration, that it is discovery, and that it requires an attitude and an approach to learning that stress the openminded search for knowledge. These very concepts may be completely contradicted in science courses where memorization of information is the major method and objective. Unless the idea of the science club influences regular science teaching, its potential contribution will only partly be achieved.

The importance of continuity in any programme for change is illustrated by the above examples. This will be discussed in more detail in Chapter V, but we wish to point out here that in many cases the addition of an element to the culture should be seen as a step in a continuing process. In and of itself the addition may not represent a significant contribution; as part of a carefully planned, continuing programme, it may be a very important step along the way. However, unless follow-up and continuity are provided, there is a danger that the added element may become just another part of a complex institution which does not effectively improve the basic quality of the institution.

IMPLICATIONS

Introduction

In a more or less static society the role of education is to pass

on traditional values and teach young people how to live by them. In a developing society, where planned change is the intended policy and programme, the role of education is to equip young people to accept change and play a thinking, sensitive role in the process of change and in reinterpreting traditional values; to give change constructive direction and social purpose; and to deal with its implications. Furthermore, education as an institution must play a major role in giving quality to change, in thinking out answers to conflicts between traditional practices and new goals, and in supporting and re-establishing the moral and ethical content of living. Education which does not face up to this kind of responsibility in a developing and changing society is not meeting its responsibility or fulfilling its potential. To accomplish this task of mediating between old and new, educational leaders must at once be in touch with both the basic culture and development plans and their goals. Furthermore, educational leaders must be knowledgeable on how change takes place in a complex society, and dedicated to the responsibility of guiding change in directions considered desirable and meaningful.

The agent of change in education needs to realize that this responsibility, fundamentally, has more to do with values than with the surface aspects, organization and paraphernalia of education. Changed methods of teaching, use of audiovisual aids in teaching, use of laboratory equipment in science assessment, four-year teacher training programmes, guidance programmes, science clubs, integrated social studies, and general education will all result in little significant change in the quality of education without prior and concomitant concern for the purposes for which these innovations are introduced. Such purposes should include the building of scientific attitudes, moral and ethical principles, socialist ideals, sense of responsibility, a progressive outlook on life, mental skills, and personal and social goals and commitments required to help build a new India. The programme of work of the agent of change should reflect this concern for basic values.

Furthermore, the agent of change needs to recognize the role tradition and values play in the lives of teachers, administrators and parents, and how they are central to the process of change. Desired improvements in the quality of education, in its value-orientation, depend, in the first instance, on changes in values

among the adults in charge of education. The methods used by the agent of change in helping such adults in rethinking their own personal purposes of living and working is a critical matter in his efforts towards improved teaching and learning.

It has not been recognized adequately that the educational system is itself a cultural sub-unit with its own traditions, values and interrelated character. Change in one element requires carefully planned adjustments in other elements if the intended change is to be effective and to persist. New practices introduced must be carefully selected and adapted to assure cultural "fit". These factors need greater consideration in planning.

It is also critical to change the climate of educational institutions so that it is conducive to change. An educational institution is at a distinct disadvantage in educating for social reform, or in playing a community role in assisting development programmes, when the climate of the institution itself is discouraging of questioning, open-mindedness, innovation and discussion of fundamental social and cultural issues. Schools and colleges run on authoritarian lines and teaching accomplished largely through lectures to be memorized are not preparing young people to play a constructive role in social transformation. The extent to which the staff are involved intellectually and actively in the issues and programmes of development is another dimension of the kind of academic climate required to nurture young people in attitudes and values of social concern.

Recommendations

Throughout this chapter a number of conclusions and recommendations have been stated or implied, and discussed. The last chapter of this book deals in detail with the role of the agent of change, including implications of the ideas on culture and change discussed in this chapter. Below are outlined a number of general recommendations for national and state institutions, and for educational planners.

Research on Cultural Values Needed

1. Research and study should be carried out along two lines:

   (a) To identify systematically the main cultural characteristics and the value systems of the major cultural sub-groups in India. In so doing, values which influence behaviour should be

identified from the religious and philosophical authorities of the culture, from the current writings and discussions of life purposes, manners, morals and ethics, and from a careful observation of actual day-to-day behaviour.

(b) To analyze the value implications of India's development objectives and the kind of society she aspires to become, through studies of countries more scientifically advanced, through comparative studies of the value systems of various countries, and through scholarly projections of development trends in Indian culture.

The results of both these lines of study and research should be expressed in behavioural terms so that educators can translate them into educational practices.

The purpose of such research should not be to draw up definitive lists of values that should be preserved, values that should be discarded, values that should be modified, and values that should be added to the culture. Such an authoritarian approach would go counter to everything we are saying in this chapter. The purpose should be to provide material for the process of value reconsideration by as many people as possible throughout Indian society, and particularly material for use by educators in helping students learn to think about cultural considerations. The purpose should not be to teach a set of values, so much as to teach the process of "valuing", and value reconsideration. Those new values to which the society is clearly committed, such as democracy, free intelligence and equality of opportunity, should clearly be reflected in the way educational programmes are organized and carried out.

Recognize Cultural Factors in Planning

2. Concern for cultural factors should find a more prominent part in educational planning at all levels. Proposed innovations should be weighed in terms of their appropriate timing and the adjustments required to accommodate them into the current scene. The peculiar needs of children and communities of a particular cultural tradition should be recognized in planning curricula and school organization. The process and problems of socio-economic growth should occupy a prominent place in the content of secon-, dary and higher educational curricula.

In these and other ways educational planning should recognize the interpreting and mediating role of education for individuals and groups caught in the turmoil of a changing society.

Involve Social and Behavioural Scientists

3. Society and behavioural scientists trained and experienced in studying and working with cultural change problems should be associated with educational planning. Research studies should be carried out to learn more about how the principles of change apply in the Indian context.

Technical assistance teams working in education should have one or more staff members familiar with Indian culture and trained to interpret it in terms of development goals. The experience of development projects in areas other than education in India should be analyzed to discover their methodological and substantive contribution to educational planning and procedures. The need to accommodate cultural factors is so great that every group of development planners should communicate with other groups whose experience may be helpful.

Increase Training of Scholars of Change

4. More potential leaders in education should be given advanced training in anthropology, educational sociology, and social psychology. Persons with such training should be used significantly by State Departments and State Institutes of Education, University Departments of Education, planning units of the Ministry of Education and the Planning Commission, and by various departments of the National Institute of Education.

Train Educators in Change Process

5. Educational workers responsible for administration and supervision of educational institutions and personnel in the field should be given orientation to cultural change considerations. Inspectors, headmasters, extension coordinators and State Education Department officials should become sensitive to this area of concern and they should be helped to learn how to adjust their work accordingly.

The flexibility that is recommended in curriculum and school experience to accommodate local cultural environment might lead to a lowering of standards. But sensitivity of local supervisors to

cultural factors could make possible the maintenance of higher and more appropriate standards. They can make a contribution to an understanding of the nature and need for change among educational workers at the school level, and among parents and leaders of other social agencies. Above all, such workers should strive constantly to become more understanding students of the culture of the area in which they work.

Increase Curriculum Content on Cultural Change

6. Lastly, basic courses leading to an understanding of the processes, the difficulties, and the possibilities of social change should be included in the curricula of training schools and colleges preparing elementary and secondary school teachers.

The two major responsibilities of the schools as regards tradition and change defined at the outset of this section makes a new role for the teacher in a changing world. He is a mediator between the conflicting forces of tradition and change. But equally he is the moulder of young people who can accept change, understand its implications and adapt to them.

The training institutions have a heavy responsibility as regards cultural change.

SUGGESTED READINGS*

1. Arensberg & Niehoff, 1965, chaps. 2 and 3.
2. Barnett, 1953, chaps. 2 and 3.
3. Braibanti & Spengler, 1961, chaps. 3, 4, 6 and 7.
4. Carlson, 1965, chap. 2.
5. Doob, 1960.
6. Dubey, 1958.
7. Erasmus, 1961, Part 2.
8. Foster, 1962, chaps. 1, 2 and 3.
9. Goodenough, 1963, Part 1, chaps. 17 and 18.
10. Leeper, 1965, chap. 4 (pp. 55-71).
11. Levine, 1964.
12. Lionberger, 1960, chap. 7.
13. Mack, 1967.
14. Malinowski, 1945, Part 1.
15. Mukkerji, 1965.
16. Piper & Cole, 1964.
17. Prasad & Juyal, 1966.
18. Rogers, 1962, chap. 3.
19. Steward, 1955, chaps. 3 and 4.

* The books referred to in this list are included in the select annotated bibliography appearing at the end of the book.

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Readiness :
Motivation for Change

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Can he [the teacher] entertain a new idea? This implies mental alert-ness and receptivity... a mind that is not closed and hidebound but open to new ideas and suggestions, able to examine them critically but with tolerance, and prepared to modify his views and beliefs on the basis of tested evidence.

— K. G. SAIYIDAIN

GENERALIZATIONS

THE following generalizations about readiness are discussed and illustrated in this chapter:

1. Persons expected thoughtfully to change their way of thinking and doing must feel a need to change, they must recognize the need for what it is, and they must have the desire to try new practices.

2. Introductory experience with new practices, observation of demonstrations, and exposure to innovations used by others, under favourable circumstances, can be most effective ways of providing initial motivation.

3. Acceptance and continued, appropriate use of a new idea or a new technique depends on understanding the purpose, the significance and the expected effects of the innovation.

4. *Dissatisfaction is a major factor of readiness;* however, extreme conditions of low morale, job dissatisfaction and hopelessness are likely to discourage readiness to experi-ment or to work for improvement.

5. A person is more likely to accept a new idea if he has some personal identification with it; if he has had a part

and he had given Teacher Y some help in putting on demonstrations. Teacher Y's father was a skilled carpenter who worked hard to send his children to school and he had taught them how to use some of his tools. When the announcement of the workshop on making science equipment came to the school, the headmaster asked Teacher Y if he was interested in attending. He replied in the affirmative and the head-master promised to help him to get material for the construction of apparatus if he wanted to make and use it in his science teaching.

Which teacher, Teacher X or Teacher Y, is more likely to make use of the training given in the workshop? Why Should both teachers have attended this kind of workshop? Will Teacher X be more or less interested in another such workshop if he fails to make real use of this one?

INCIDENT B

An extension coordinator came to know of a teacher of social studies who had learned how to use flannelgram materials in his teaching, and who used this audio-visual device with imagination and skill. He decided he would arrange with several headmasters to take this teacher into schools other than his own to demonstrate the flannelgram. The co-ordinator decided first to have the technique demonstrated in the class-room of a teacher famous for his ability at lecturing and for his exclusive use of this method. He arranged for the event through the headmaster. Other teachers in the school were invited to watch the demonstration. The demonstration was given successfully, the students responded enthusiastically and the witnessing teachers asked questions, stated their hesitations and voiced their mild enthusiasm. The teacher in whose classroom the demonstration was given, however, reacted very emotionally and very negatively. The use of such devices is a waste of time, he said; no teacher could find the time to make them; the materials are not available; his own method of lecturing is much more effective and more material could be covered in less time. Obviously, he resented the coordinator arranging a demonstration before his students intended to show up his weakness as a teacher. Needless to say, the demonstration was wasted on this teacher and the coordinator was disappointed.

After some time, and some thought, the coordinator arranged another demonstration in another school. This time he decided on a different approach. He asked the expert teacher skilled in using the flannelgram to demonstrate it for a group of teachers with no students present. After the demonstration he asked those teachers who were interested in the technique to stay longer and to discuss the various possible uses of it in their classes. He asked if one or more teachers would volunteer to plan a lesson using the flannelgram and to demonstrate the lesson with his own class. After some hesitation a senior teacher who was well liked, but not known for his imagination in teaching, was jokingly "talked into" volunteering. Over the next few weeks the coordinator gave the teacher assistance in planning the demonstration lesson and the head-

master encouraged the experiment. A day was appointed for the demonstration, teachers were invited to witness it; the demonstration was successful, and the students were dismissed. In the discussion that followed the expert teacher made a few minor. suggestions. The demonstrating teacher was happy about his trial and enthusiastic about further use of the flannelgram in teaching.

Why did the first teacher react so strongly? Why did the coordinator change his procedure for the second approach? Was the second teacher really any more ready than the first before the demonstration by the expert teacher?

INCIDENT C

Two or three officers in a State Department of Education recognized the need for cumulative record cards. Using models from abroad and more simple cards developed by a few private schools in the State, they worked up a new form they thought to be appropriate for all schools. It was discussed in several meetings attended by their co-workers; a few headmasters and teachers were asked to give their comments. Further revisions were made and the form was finalized. The card and a proposal for introducing it on a state-wide basis was submitted to the State Government which approved the plan. In due course it was printed in quantity and distributed to schools with printed instructions on how to fill them out.

After some time a check was made in a number of schools. It was found that teachers were not filling out the cards properly. In many cases no entries were made at all. Where entries were made they were sketchy, poorly written and sometimes unintelligible. The teachers obviously did not know how to rate children's personality and character nor did they know how to describe such traits in clear terms; in fact teachers for the most part were not interested in such characteristics of their students, except in the case of problem students or outstanding students. No one had shown any interest in this aspect of education before; they were accustomed to be concerned mainly about academic performance.

As a result of these observed problems, the newly formed Guidance Bureau took responsibility for organizing workshops throughout the State in which training was given to all headmasters on how to fill out the cumulative record cards. Some discussion was also held on the purpose of the cards and how to use them. Headmasters were instructed to train their teachers.

Over the next several years a number of informal checks were made to see how the schools were using the cards. It was found that some schools were doing a good job in filling them out and in some cases the cards were actually used when students moved from school to school. In general, the picture was not very promising. Recently the first class of students whose complete secondary school experience is recorded on the cards has finished school. A sample survey of these cards shows

that much work yet needs to be done to train teachers and to interest them in doing a satisfactory job of filling out the cards properly.

Is the problem here one of approach or of timing, or both? Will this experience with cumulative record cards build readiness for their use in the long run? What steps might have been taken before the system was introduced?

INTRODUCTORY COMMENTS

Why Is Readiness Important?

Readiness is theoretically recognized as a prerequisite for learning. It may be taken into account in deciding at what age children can learn to read. It may be recognized in planning the sequence of topics in social studies and science, for instance. Some teachers take steps to build interest and readiness before launching on a new topic in the syllabus. In many school situations, however, readiness is ignored. It is possible to do so because the classroom situation is highly controlled and students are conditioned to follow along in covering the textbook. Apparent progress is obvious as the topics are covered one by one and the actual test of learning, the external examination, is some time in the future.

Learning is also involved in the introduction of innovations among adults. Likewise, readiness for learning is a critical factor. However, it cannot be so easily ignored in the classroom since the results intended more directly depend on the sincere interest of teachers and headmasters. They are expected to make an immediate application of what they learn. The failure of so many efforts at school improvement demonstrates what happens when readiness is neglected. The teachers listen politely, return to their classrooms and continue their work as before; or they pretend to cooperate with the new programme but fail to implement its spirit; or they distort the intended innovations in a way that their application disturbs their routine least.

There are many reasons why many innovations have been less than successful, but failure to build readiness, or to discover and build on readiness, is a major reason. In fact, a basic and rather obvious truth about teaching seems to be neglected. The very nature of teaching is such that significant improvement is possible only when the teacher wants to improve. In the classroom the teacher is king. No authority can control what he does

or does not do. No rule or administrative device can determine the method or character of his teaching. What he does and how he does it depends on his interests, his drives, his values, and his concept of himself. He can be frightened, coerced, influenced, educated, trained, or guided, but the end result depends on what he really wants to do, on what he feels is important, and how he sees his role. Any change in what he does or how he does it, any new methods or emphases, any greater depth of purpose in the classroom, any innovation that has essence and not just form, also depends on his enthusiasm, readiness, desire to do a better job and confidence that he can do it. Moreover, these forces in him must be strong enough to counter the forces of tradition, lethargy, acceptance and comfort which often go with the beaten path, and the forces of insecurity, fear of ridicule and frustration which often accompany innovation and experimentation.

In their hurry to bring about progress many Indian leaders have gone ahead without adequate concern for motivation. They have assumed that, since they recognized the need for new ways, everyone else did; or they have felt that new programmes could be imposed by authority and that it did not matter what was or was not important to the people at the lower levels. In too many cases the results have been predictably discouraging. In fact, pressure from above may have increased resistance to change, and sharpened the considerable skill of many people to "accommodate" the authorities through pretence and camouflage. This is a natural, human reaction under such circumstances.

The three incidents described above illustrate some of the facets of the problem of motivation for change. They will be referred to below as we present and discuss a number of generalizations about readiness. The intention here, as in other chapters, is not to prove that a particular factor is all-important or all-controlling in any one situation. We know this is never the case. Nor is it our purpose to indicate exactly what the approach of the agent of change should be in every situation. We know that human affairs are far too complicated to make this possible. We do hope to build understanding of some of the factors that should be taken into account in planning and implementing programmes of change so that readiness is thoughtfully provided for in one way or in many.

What, then, are some of the important ideas to be kept in mind?

DISCUSSION OF GENERALIZATIONS

Dissatisfaction and Felt Need

There are many reasons why a person tries something new. It may be because of deference to a respected leader. It may be because the majority have adopted a new practice and group pressure to follow is great. It may be because of a tendency to flirt with everything novel that comes along. It may be because of a revolutionary belligerence against everything traditional. These and other reasons for experimentation cannot be ignored, but they are less likely to lead to meaningful and lasting innovation than is sometimes expected. A basic source of motivation for change is dissatisfaction with the current state of affairs and a focused feeling that certain changes will produce greater satisfaction. To put the point generally: (1) *Persons expected thoughtfully to change their way of thinking and doing feel a need to change, they must recognize the need for what it is and they must have the desire to try alternative solutions.* Teacher Y in our Incident A above is more likely to make use of training for improvising science apparatus because he had previously developed some awareness of the need to use it in teaching. He volunteered to attend the workshop which shows some motivation. Whether or not he will really make full use of what he learns depends on many other factors, but some readiness was present. On the other hand, few teachers in the State cited in Incident C had reason to be interested in filling out and using cumulative record cards. Few of them had done any serious thinking about purposes of teaching other than getting students through examinations. Furthermore, few of them were familiar with precedents for exchanging information on personality from school to school when a student is transferred. Certainly few of them had ever felt the need for information on personality traits when new students came into their classes. Sometimes, when a new student turned out to be a serious disturbance. Even if he had a teacher wished he had known more about him. Even if he had known, little would or could have been done to take these factors into account because there are no guidance facilities in schools

and there are few means for recognizing individual differences.

Perhaps the introduction of cumulative cards should have been approached differently; or not approached at all until a clear-cut feeling of need had been developed for the potential service they provide. Maybe the prior task was to work with teachers on the purposes of their teaching, to encourage inspectors, headmasters and parents to expect from teachers some attention to social habits, attitudes and personality traits among students. Maybe the university should have been encouraged early to take such factors into account in selecting students for admission. It is recognized that all of these factors will be slow to change, and difficult to change, because they are so interlinked with cultural attitudes and values. Nevertheless, in time, they will change, if the long range goals of the leaders of and dreamers about Indian development are consistent in their efforts. Something like a cumulative record card will be needed in time; or maybe some quite different device will serve the purpose better, a device that grows out of the Indian school situation rather than out of experience in other countries. Whatever shape it takes, such a service will more likely be meaningfully used when the need for it has developed in the minds of the people expected to use it.

It is easy to be discouraged with an approach based on the teachers' own desires to improve. "Teachers have no academic problems they want to discuss," is often said. "They are anxious to talk about the examination system, or low salaries, or lack of books, or the harsh inspector, or the students' apathy; but they seldom talk about their own weaknesses and need for help." This is true, and it is to be expected. We are dealing with a human and a cultural problem. It is human to show a good face, to blame the situation on other people or impersonal factors. It is a culturally encouraged reaction also. The inspection system encourages teachers to cover up their problems. A teacher is rewarded for presenting a well-ordered picture of his abilities. He is too seldom praised for admitting he has a problem and seeking help on it. He is not drawn out by the inspector, the headmaster, or very often by his colleagues in soul-searching discussion of professional needs. More generally, it is rare for a person to take his job seriously enough to worry deeply about how to improve his performance. Family questions are more

important; social relationships take a lot of attention; *recognition and achieving a respected status are important and are only indirectly a matter of quality of work.*

In spite of these diversions, teachers do have problems and they are *willing to talk about them if they are approached* seriously and sympathetically. Perhaps the most important talent the agent of change can develop in himself is the ability to draw out teachers and other educational workers, to find out what is really bothering them. He must develop the ability to "put himself into the other person's shoes", to see things from the other person's point of view so as to communicate real understanding and concern, and thereby to release inhibitions against talking about personal and professional weaknesses. In individual contacts and in group meetings he must cultivate the habit of asking probing but sympathetic questions, of pursuing a matter to its roots. Of course human relations are paramount, and it may take time to establish the kind of relationships required for such frank, penetrating discussion. The agent of change who is an administrator may have the greatest difficulty in cutting through the barrier that normally exists between persons of different levels in the hierarchy. He is in a position, however, to provide immediate response to a problem. *If he provides real and immediate help rather than censure he will have gone a long way towards encouraging subordinates to talk about their problems.*

Once a person admits he is sincerely dissatisfied, *it is often necessary to give him help in clarifying and focusing his problem;* general dissatisfaction is not a very sound basis for planning remedies. Such help can be given through individual discussion and guidance or it may be provided through a group meeting with other people wrestling with similar dissatisfactions. In one workshop a headmaster expressed considerable general dissatisfaction with his staff and students. After he had talked at some length on the subject in a general session, one of the workshop leaders *took him aside and drew him out.* In the course of discussion it became clear that what the headmaster was really concerned most about was lack of cooperation from his teachers. Through further discussion he admitted that the problem might be his own lack of ability to deal with certain teachers. This appeared to be a revelation to the headmaster who, for the first time, *could see that the problem was specific,*

that it was his personally and not the teachers' and students'
generally. He was then ready to discuss alternative ways of
improving his relations with the "problem" teachers and im-
proving his communications with them.

Introductory Experience, Observation, Exposure

Although readiness is necessary for significant learning or
innovation, it is not always desirable or necessary to wait for it
to develop. The agent of change can use a variety of methods to
motivate, to stimulate readiness. In fact, he may make use of
the tendency of people to "go along with their friends" or to
follow the lead of respected leaders, even though he knows that
their motivation is not based on a sincere feeling of need. He
does this knowing that: (2) *Introductory experience with new
practices, observation of demonstration, and exposure to innova-
tions used by others, under favourable circumstances, can be the
most effective ways of providing initial motivation.* In Incident
B above, the second teacher introduced to the flannelgram had
the kind of experience that was likely to make a positive and
lasting impression on him. He agreed hesitantly, under the friendly
encouragement of his co-workers, to work up a trial demonstra-
tion. He was given private assistance in preparing his demonstra-
tion, and he was encouraged to do the demonstration with his
own students with whom he had rapport. Such experience is
effective in part because it makes possible greater understanding
of the nature and purpose of the innovation. The experimenter
comes to see how the innovation relates to his innate desire to
do a better job. This may be true if the experience is a satisfying
one; if it is not he may reject the innovation. This is the risk
that must be taken with any new idea; for the worth of the new
method must be proven to the person who is expected to accept
it if lasting change is to take place.

Demonstrations have proved to be effective motivators in many
areas of development in India and in other countries. Perhaps
the most successful use of demonstrations occurred in the United
States in the agricultural extension programme. The County
Agricultural Agent found that farmers were more receptive if
the Agent demonstrated the new tool or the new way of cultivating
the land. They were also impressed if the new seed or commercial
fertilizer was used on a plot of land and they could see the

results. Similar methods have been used successfully in improving Indian agriculture. Demonstration lessons have been found to be an effective method by school inspectors. Such lessons must be carefully planned to show a specific technique, and probing questioning from teachers must be allowed, yes, encouraged. Still better, teachers may be encouraged to try the technique themselves. Of course the demonstration should always be preceded by information and discussion of the innovation to be demonstrated so that the teachers are prepared to view the lesson understandingly and critically.

In fact, exposure to desirable practices as a basis for discussion is all too lacking in the background of Indian teachers. They tend to teach as they were taught in primary school, in secondary school, in college, in their postgraduate studies and/or in their training. For the most part they have endured unending lectures. They have not had the opportunity to experience or to observe good teaching, creative teaching, teaching of depth. Theories of education are familiar to them; examples are not. Therefore, the most needed elements in in-service training should be observation of, exposure to and actual experience with improved ways of working and teaching. The planners of improvement programmes should use every available resource to provide these elements. Some can be provided through demonstrations, through visits to schools or colleges where improved and different practices are in use, and through films and other audio-visual devices. Others can be provided in the change programme itself. In workshops and seminars, group procedures can be used, evaluated, and improved, and their use in teaching can be discussed. Participants can be given experience in leading discussion, in recording progress, in observing and evaluating group processes, in role-playing, in asking searching questions, and in reporting their own experience relevant to the discussion. Work in small groups can be organised to go deeply into selected problems. Participants can plan and demonstrate a part of what they intend doing in their teaching as a result of the workshop. An opportunity can be given to the participants for creative work within the overall framework provided by the director of the meeting. Facilities and time can be provided for deep library research on a problem, provided the necessary books are available, and provided the participant has a problem he wants to pursue.

These and many other techniques can be used to carry participation and learning beyond the verbal to the observational and experiential levels. Unless this is done, little readiness to experiment or innovate on return to the classroom or the school office will result. Unless this is done the participants will go away with no greater motivation than usually results from a moralizing lecture.

Understanding Innovations

Bringing observation and experience into change programmes will help the clients learn how to use new practices. It will help them get over the initial hesitation most people have in such situations. It will also contribute a rational and cognitive element to readiness without which the innovation may be superficially used or discontinued after a time. In other words: (3) *Acceptance and continued, appropriate use of a new idea or a new technique depends on understanding the purpose, the significance and the expected effects of the innovation.* This understanding may not be complete or profound in the early stages but the nourishing of its growth is essential. This is particularly true in educational work. In purely administrative or repetitive work an improved practice can be successfully introduced without full understanding by the worker. He uses it according to a prescribed set of instructions and all is well. This is not true in teaching. There are few acts in teaching which can be mechanically performed with success. The use of audio-visual aids is an example. Too often teachers use them for general or vague purposes. The students like the diversion of a film and the teacher is free from responsibility for a period. Or the students like the activity of making charts. But the actual contribution to teaching is missing because the teacher has not thought through why audio-visual aids should be used, exactly what a particular film or graph is intended to teach, or what the students' reactions or questions will be. To take another example, science clubs have been started in many schools on the initiative of extension coordinators. They were enthusiastically taken up by many teachers because they were obviously an attractive idea. In few cases was there a prior, clear-cut, felt need for a science club. In some cases, through the diligent efforts of the coordinator or the science methods master of the training college, or the headmaster, the purposes of science

clubs were fully developed in the minds of teachers over a period of time. In such cases these clubs are making a significant contribution to improved science learning. In other cases they have died; or they have become routine and stereotyped, with little meaning to students and teachers alike.

Rather than promote science clubs, prescribed experimental projects, or the use of films *per se*, the agent of change might better spend his time discovering teachers' interests, their conscious problems and their desire to work for the solution of problems. He might better search out these evidences of beginning readiness, sort them out in terms of their potential, organize them into categories of clarity and maturity, and plan his work accordingly. He can enlist the aid of other leaders such as inspectors and headmasters. He could decide to work with some teachers individually. Others might be brought together into common-interest groups and given help in planning their own tentative projects or experiments. A workshop for this purpose can serve as the first step in developing the kind of understanding and rationale necessary for the intelligent use of a new idea. No, it is not the first step; the first step takes place within the teachers—it is the germination of an interest, a felt need, a concern.

It is also desirable for the clients of an improvement programme to understand the overall implications of a particular innovation. The inspector who is encouraged to rely less on authority and more on persuasion must know that it will be normal for some teachers to take advantage of this new approach. He must understand that his changed behaviour assumes greater self-reliance on the part of some teachers, and he should help them to grow along these lines. More important, he should help the headmaster to understand the implications of the new emphasis in inspection; the headmaster is in closer contact with teachers and can provide day to day support to teachers affected by the innovation. To take another example, schools which take up internal assessment programmes *need to understand that more* is involved than the making, giving and scoring of tests in the school. The headmaster takes on new responsibilities for administering internal assessment—making sure the system is carefully organized, helping teachers learn how to make good tests, keeping the results confidential where the interest of

students requires this, explaining results to parents, and many other new duties. The teachers must realize that internal assessment changes their relationship with students, and they should be given some understanding of what this may mean in day-to-day teaching. The teachers in Incident C might have developed greater interest in filling out the cumulative record cards if they had come to see the cumulative record cards in the context of a broader set of teaching goals.

In fact, we are saying that social change, of which change in education is a part, cannot be broken into isolated parts, each dealt with one at a time. Practically any innovation in teaching method, content or purpose has ramifications way beyond itself. The agent of change should understand this generally; he should help his clients also to appreciate this fact. This does not mean that each group of teachers must first be given a course in the theory of social change; it does mean that they should be helped to develop a beginning understanding of the significance and expected effects of the new idea or practice, and that they should be helped to grow in this understanding as experience with new ways matures. Timing is an important factor in this process. Some teachers may be frightened by the larger implications of an innovation. For them, discussion of implications may be staged. For other teachers, appreciation of the larger signification may increase their interest and motivate them to a more intelligent and sensitive readiness. Sensitivity to such differences is important in planning and promoting change.

Moreover, the individual innovator should see his individual role as part of the larger programme for improvement. In much of the work for examination reform in India this factor has been kept in mind. Whether the specific concern of examination reform work at a particular time was objective tests, internal assessment, improved essay questions, marking and scoring objective-based questions, or administration of examinations, the overall examination reform programme as a whole has been discussed. Persons working on objective-based tests need to understand the implications for teaching in the classroom. Persons receiving training as paper setters should see the importance of doing this job well as part of the total programme. Those schools experimenting with internal assessment need to understand the implications of their experiment as a potential part of a revised examina-

tion system. This understanding of the whole change programme helps to make meaningful the individual innovations and experiments, and helps to build informed motivation for change.

Faith in Individual and Group Effort

INCIDENT D

The new headmaster of a school found morale to be very low among his staff. They complained about the students, the parents and each other. They said that students came late and left early, that parents would not cooperate in handling discipline problems, that the students were not interested in studying, that some teachers slept during school hours and spent their evenings and Sundays giving private tuitions, that they wanted to transfer to other schools, and that nothing could be done to improve the school. They were bitter and pessimistic about everything. Some teachers were not as negative as others but even the more optimistic ones were critical of the morale of the majority. There was obviously no *esprit de corps* and no cooperation among teachers. The teachers themselves came late and they seldom stayed around after school to talk about school problems. They just didn't care. Of course each blamed the others for the state of things, and the former headmaster came in for a good share of criticism.

The new headmaster made a number of suggestions to individuals but in each case the teacher found many reasons why the suggestions could not be carried out, or he said little and did nothing to implement the suggestions or he protested that he alone was already doing what the headmaster suggested. The headmaster decided that something must be done to lift morale, to build pride in the teachers and faith that something could be done to improve the situation. Being new, he felt he could probably get teachers' cooperation on a group project. He called a staff meeting and asked for their cooperation in an experiment. He had asked his clerk to analyse the attendance records of the first few weeks of school which showed a high rate of tardiness and absenteeism among the students. This was not news to the teachers but they had not seen any data on the subject before. He asked for suggestions on how late-coming could be reduced; he got no response. He asked if they knew why students came late. A number of general reasons were given such as "They are not interested in school", but no specific reasons were offered. He then went on to say that the data showed that some students were regularly late. He named some of them. Still no explanations were given. He then outlined a suggested plan made up of three parts: (1) he wanted three teachers to volunteer to investigate why several students were consistently tardy; (2) he suggested that teachers be posted at the several gates to the school each morning as a symbol of school interest in students prompt arrival; and (3) he asked that each teacher plan to start his first period class on time, regardless of how many students were tardy, and that the first part of the period be taken up with some

special activity relevant to the class but of special interest to the students. He asked for questions or suggestions. A few were given and he amplified the plan accordingly. Two teachers said they could not come early every day; a compromise was worked out in which they alternated with other teachers. The staff expressed little enthusiasm about the plan saying they were sure it would make no difference; they agreed to give it a try, however, partly to humor the new headmaster.

The plan was tried for a week. At the end of the week a meeting was called and the headmaster asked for suggestions on changing the procedures before going on to the second and last week of the experiment. A few teachers said they thought it was making a difference; others disagreed. The headmaster gave no data. At the end of the second week another staff meeting was called. The three teachers who had investigated the causes of consistent tardiness gave their report. They found that in about one-third of the cases the students had a real reason rooted in the home. Some of the home situations could be corrected if the parents tried; others could not be corrected without major assistance to the home. Discussion on the report was somewhat lively. Teachers showed a beginning interest in talking about the problem seriously; they exchanged ideas, they supported each other. Eventually one teacher asked the headmaster what change in tardiness had taken place during the two-week experiment. This time the headmaster had his information ready. It was not conclusive but it was encouraging. Tardiness had definitely gone down but it had not disappeared. In addition, absenteeism had also gone down significantly. One teacher said that he thought students' attitudes in class had changed for the better, he didn't know why. Some supported this report, others disagreed. Others said that interest had not improved but that discipline had improved. The headmaster complimented the teachers generally on their efforts to make the beginning of the first period unusually stimulating for students and suggested that these efforts might be discussed another time. Many teachers participated in the discussion, but quite a number did not.

After a time the headmaster turned the discussion to other related problems in the school and asked for ideas. One teacher suggested that there should be meetings with the parents to discuss problems of regularity of attendance, and homework. Others protested that there was no time for such meetings since many of the teachers were very busy after school hours. The headmaster volunteered to try to get permission from the education officers to send the students home at the middle of the day once or twice a month to make time for discussions with parents. The teachers applauded this idea. The discussion went on and other ideas were mentioned. The headmaster had reason to feel encouraged, to feel that staff morale was improving, that cynicism among many would disappear if progress could be made on other problems, that cooperation for school improvement was possible and that his staff would be willing to try other innovations.

Early in this chapter we said that dissatisfaction was a necessary

condition for readiness. There is another side to the question: (4) *Dissatisfaction is a major factor of readiness; however, extreme conditions of low morale, job-dissatisfaction and helplessness are likely to discourage readiness to experiment or to work for improvement.* The incident cited above may be an unusual situation, and then again it may not be. Certainly cynicism is common among teachers of some kinds of schools, more so in some areas than others. There is also a large measure of indifference among school personnel and a feeling that better conditions are not worth the effort required. On the other hand, in hose schools which have high standards, in which experimentation is a regular feature, and in which the school personality reflcts the general acceptance of practices not found in the routine school, morale and job-satisfaction are high. It may be difficult to say clearly which comes first, readiness to change or high spirit and a positive outlook, but the two are certainly interrelated.

Many factors contribute to job-satisfaction. If asked about it, teacers, headmasters and inspectors would probably cite monetary factors first. For the most part, school administrators and agers of change can do little to improve salaries, although they shoud exercise appropriate influence in this direction when it is wrranted. There are other factors affecting morale which they canlo something about. Obviously the headmaster in Incident *D* hadsome ideas about it. He apparently felt that if teachers could see ome results from their effort, even on a small problem, it woul help to build morale. He also seemed to have some faith in goup effort and the need for *esprit de corps* which can come fror a satisfying group experience. Research in industry in India andother countries has shown that initiation and acceptance of inneations is very much influenced by satisfaction with working coritions. More needs to be known about how these factors work in lucation, but the experience of workers in many fields has indated that this headmaster is on the right track. In addition, his initiative, his effective administration, his willingness to lista to the suggestions of his teachers, should all contribute to ifeating the negative, hopeless attitude of his staff.

Invement in Planning

Thileads us to another, related generalization which supports

to be started by the headmasters rather than by him, he held back from taking complete initiative. Then he became ill. His doctor told him he would have to stay in the hospital for a week and then he should rest for another month. In addition to being ill he was upset because he felt this meant the end of the forum idea. The inauguration was only ten days away and little had been done to prepare for it.

The coordinator need not have worried. He had built a better beginning than he thought. The progressive headmaster, hearing that the coordinator was ill, and, by this time having identified himself very closely with the plans for a forum, stepped forward and took charge. He asked several members of his staff to help, he met with the constitution committee and all other arrangements were taken care of on his initiative. The coordinator could not attend the first meeting, but he learned later from several people that the forum was off to a good start, attendance at the first meeting was large, a good slate of officers were elected and further programmes were planned for the near future.

The central point in this incident has been very often overlooked in launching new programmes at the centre level, at the State level, and even in the work of extension workers at the local level. The cultural values so thoroughly ingrained regarding hierarchy tend to work against involving clients in the planning. The great desire on the part of national leaders to "get the job done" motivates them to go ahead and formulate the programme and to launch it, and the hesitation of persons at the lower levels to speak up and demand their right to help plan also discourages the adoption of routine procedures for meaningful involvement in planning. The coordinator in the Incident described above was very anxious to start a headmasters forum. He was convinced there was a need for it and that it would serve a good purpose. But he refused to follow the path of so many planners and administrators who are convinced they know the solution of a problem; he refused to impose his idea even though he knew from earlier experience that he would probably be successful in doing so, in form at least. He knew that without leadership coming from the group itself, especially from the key members of the group, the forum would become just another of the many "paper" organizations which has no real life in it.

As already stated, one of the problems in a traditionally hierarchical society is to motivate leaders at the lower levels to defend their right to be involved in making those decisions which directly affect their work. In a recent meeting of extension workers there was discussion of how to get a greater measure of cooperation

and leadership from State organizations without losing the autonomy that is so necessary for extension work. It was suggested that the State authorities should be encouraged to suggest programme items for consideration by the extension worker in developing his annual plan of work. He would be free to accept or reject the State suggestions in terms of the many local considerations of readiness, resources and continuity so important to a good programme. The extension workers were bothered by this idea, however. They felt that their programme planning would be compromised by suggestions from State authorities. They said that any suggestion from the State would have to be treated as an order and they would have no choice in accepting or rejecting it. Furthermore, some of the extension workers expressed real concern as to what would happen to them if they questioned in any way the wishes of higher authority. This situation seems to the authors to represent one of the greatest handicaps to effective change programmes, whether they be in education, agriculture or any other area of development. Obviously the initiative to modify this rests with the higher authorities; further discussion of the problem will be taken up in Chapter 5.

Practicality and Practicability of the Innovation

Another factor conditioning readiness has to do with the client's judgment as to whether or not the idea can be put to real use. To put it more generally: (6) *Readiness to adopt a new practice depends on the client's perception of the harmony among the innovation, the setting in which it is to be used, and his own skills and abilities.* A number of related factors are involved here. One question has to do with how practical the innovation is in the Indian school setting. It doesn't make much sense, for instance, to talk about individualizing instruction in classes of fifty or sixty students. Nor will many teachers accept the suggestion that students should do library research in schools where there is a meagre library. Many such impractical ideas are suggested out of experience of schools in the more advanced nations where the situation is very different.

Another question has to do with the knowledge and skills required to use the new practice. In Incident *A*, science teacher *Y* was obviously more prone to make use of the training in

making science apparatus because he already had some skill learned from his father. To cite another example, teachers who have some natural and/or learned ability to work informally with groups are more likely to favour democratic decision-making in managing student activities. Probably a major reason for hesitance on the part of administrators to abandon autocratic methods of running institutions is their lack of skill in handling group discussion. Certainly teachers of general science and social studies in schools, and general education at the college level, have feared these major innovations because they knew they did not have the knowledge and skill required to work them.

It should be noted here that it is not just a question of whether or not the suggestion is practical or practicable, it is a question of what the potential users perceive the situation to be. Often demonstration by the agent of change or an educational worker will help to break down unwarranted hesitance. If clients are given a chance personally to try using the innovation, fear of inadequacy can be reduced. One of the reasons why the first teacher in Incident B reacted emotionally against the flannelgram may have been hesitance to show his lack of skill in the required manual skills. Or to put it another way, one of the reasons he had come to rely so heavily on lecturing as a method of teaching may have been the fact that he had a high level of verbal skill and a low level of manual proficiency.

Innovation and "Self-image"

However, another factor is probably more responsible for the teacher's strong negative reaction to the flannelgram demonstration. It is this: (7) *Readiness to accept change is conditioned by the individual's perception of the relationship between the innovation and his "self-image", the psychological bases of his personality, his social relations, and his personal goals.* If the innovation seem to be in harmony with the things most important to the client, he is more apt to accept it. If it seems to threaten his psychological security he may reject it. If the new practice undermines the person's view of himself and his view of what other people respect him for, his readiness to accept it will be lacking. The teacher referred to above was probably upset because a demonstration was given before his students which obviously put him in a bad light. He saw his reputation for

lecturing being undermined. He could only fear the introduction of such techniques with which he was not familiar and with which he felt no affinity.

Incident F presents another example.

INCIDENT F

A member of one of the State education agencies remembers that when she was an adolescent girl her mother frequently beat her. Being a sensitive child she very much resented being beaten, although she continued to love her mother who was obviously motivated by a fear that the daughter would "go wrong". This strong feeling of resentment stayed with the girl through college. In her post-graduate training she was introduced to educational psychology and had a teacher who laid much stress on the need to treat adolescents with love and understanding. This idea appealed to her very much and she vowed that when she became a teacher she would treat her students quite differently from the way her mother had treated her; in fact, differently from the way most teachers treat their students. This goal became something of an obsession and in her first teaching job she experimented with a number of techniques for maintaining discipline without the threat of physical punishment. She was successful in these endeavours and attracted the attention of other teachers and of administrators. Later, when she became a headmistress and then an inspectress, she continued to emphasize the importance of teacher-student relationships based on understanding, friendship and respect. She became known for this personal quality.

Every person is more interested in some things than others, and is more susceptible to suggestions on one problem than on others. Very often these strong inclinations grow out of experiences during youth. As in the case cited above, these experiences leave a permanent impression on the personality, an impression that strongly conditions how the person reacts to situations, how he views life, what motivates him. The agent of change may not be able to get to know all the people with whom he works well enough to be able to cater to their strong likes and dislikes. He can, however, search for evidence of strong feelings wherever possible, and he can take these into account in suggesting and planning ways of improving the work of the individuals concerned. It is particularly helpful if he can draw out the key leaders, the authorities and others in positions of leadership, to find out how each perceives his role as a leader, the major drives in his personality, the aims he holds most strongly for himself, and how these forces influence his relations with others

in his work. *The promotion of effort for improvement and progress is, after all, mostly a matter of human relations.* Good human relations depends on coming to know people well, to understand what makes them behave as they do, and to sympathize with their ambitions and drives. Obviously, the State department worker cited in Incident *F* is more amenable to suggestions for change which relate to her strong antipathy to physical punishment of students. She will probably take leadership for projects which fit in with this strongly held value. Her response, in general, will be influenced by this and other strong elements in her personality. Such factors are of major importance in stimulating innovation and experimentation.

Change and Material Reward

(8) *Readiness to change is related to the threat posed by innovations to material and social benefits, and the assurance given of similar or substituting benefits from new practices.*

The external examination system is probably more discussed and criticized than any other aspect of Indian education. Repeated committees and commissions have called for reform over the past hundred years. Central and State organizations have been working for many years on major revision of the system. At annual conferences year after year officials of the State Boards of Secondary Education meet and endorse the recommendations made for change. In spite of all this, acceptance of basic change has been slow; *although the situation has begun to look more promising in recent years.* Probably one of the reasons change has been so small is that so many people have a vested interest in the system as it now operates. For the most part these vested interests are not tied to corruption, they are just a normal part of examination procedures as they have evolved. Hundreds and hundreds of educators expect extra remuneration for setting question papers, administering tests, marking papers, compiling results, and many other related jobs. Others make money by publishing "bazaar notes" and guides to examinations. Especially in the period before examinations in the spring many teachers make extra money from tutoring students. It seems strange to foreigners that Indian schools and colleges close so that students can prepare for the examinations.

There are other kinds of vested interests. A first-class pass is

an automatic ticket to opportunity—to a job, to higher education or to study abroad. Not everyone can acquire this ticket but everyone wants the opportunity to try. The reputation of a teacher is based largely on the passes achieved by his students. There are few other criteria for success than examination results, for students, for teachers or for institutions. Most people don't think about education or learning, they think about passing the examination. In fact, educators use the term "results" to mean examination results as if there were no other kinds of results from teaching, no other objectives of education.

In fact, the examination system is deeply, inexorably, unashamedly and unshakably ingrained into the culture of the country, not only the educational culture but the culture as a whole. It cannot be eliminated, it cannot be ignored; it can only be improved, gradually. But change has been disappointingly slow and one of the several reasons is the large number of elements in society who now benefit, materially and socially, from the status quo. It works, it serves its purposes, both the direct and the indirect purposes. There is fear that if it is altered substantially it will not continue to serve those purposes equally well.

One interesting and promising innovation has been tried recently. To get away from the poorly constructed papers often set by teachers untrained in examination construction, the task of setting the actual papers has been assigned in at least one State to measurement specialists in the State Examination Research Bureau. Persons who previously would have been paid to set the paper are now asked to submit test items rather than to make out the whole paper, and they are paid for the test items they submit. This innovation is promising of acceptance because it provides substitute material benefit to replace the remuneration normally provided. Possibly other schemes can be worked out to reduce the threats to vested interests posed by many of the proposals agreed to theoretically, but not introduced to date.

There are many other reasons for resistance to change in the examination system. Our purpose here is not to discuss them all, but to illustrate the importance of economic and prestige factors in resistance to or cooperation with change proposals. There are other illustrations that could be cited. Private tuitions, which are to some extent a concomitant of the examination

system, interfere with efforts for school improvement. They blur the focus on what happens in the classroom; many teachers of ability do a mediocre job in the classroom and concentrate on private tuitions which are taken outside the school schedule. Teachers resist meetings, seminars or any work outside school hours which interferes with their private tuitions. As a result, school improvement activities are not taken seriously and teachers do not cooperate fully. Some adjustment must be found which does not threaten this source of income on which many teachers have come to rely. May be a scheme could be worked out wherein private tuitions are brought within the supervision of the school and teachers' work adjusted accordingly. Maybe teachers should be paid for the amount of time they spend in attending to school improvement activities outside the regular school schedule. Other methods may be tried; the point here is that if criticism of private tuitions is sincere, then the economic problem for teachers must be taken into account in finding a solution. But, of course, the criticisms may not be sincere and a prior step may be required, that of introducing into the culture greater understanding and appreciation of educational goals that cannot be achieved through "cramming" during the weeks prior to the examination.

The greatest recognition now goes to the teacher whose students do well on the external examinations. Far too little recognition or credit goes to the teacher who is experiment minded, who cooperates fully with improvement projects, who is inventive, creative and consistent in his work in the school. Educational leaders can do something to broaden the criteria by which a teacher's qualities are judged, recognized and rewarded. Economic factors are there and they cannot be ignored; still, other kinds of reward are important and can to some degree take the place of monetary rewards. Just the simple matter of expecting higher standards and providing the kind of close, sympathetic and helpful supervision necessary to produce them would go a long way.

Another kind of vested interest is recognized by some States in promoting compulsory school attendance. In many rural communities parents are hesitant to send their children to school because they need them at home to work. They are an economic asset which cannot easily be done without. Some States have worked out a compromise. The school day is shortened and

scheduled so as to be most convenient for rural work. At certain times the school is closed so that children can help with the harvest. Other adjustments are made to suit the needs of the agricultural economy and the parents send their children to school. Flexibility of this kind in administering the school system may go a long way in finding answers to the many problems blocking desired change.

Summary

So far in this chapter we have presented, discussed and illustrated a number of generalizations to point up the importance of readiness in planning and implementing efforts to improve education. We have not attempted to be exhaustive. Many of the ideas discussed in later chapters also have meaning for readiness, including generalizations about the role of cultural traditions and values, and those dealing with the dynamics of change. The kind of leadership and support given to the innovator is of particular importance in building motivations for change.

Also, we have not attempted to give specific and infallible instructions on what the agent of change should do; we have provided no formulæ. In the following section, however, we shall attempt to set forth some recommendations, some specific and many general, which should help the planner and agent of change in implementing the ideas discussed above.

IMPLICATIONS

It is interesting to contrast the approach used over a decade ago to introduce integrated social studies into secondary schools and the approach now being used to introduce general education into colleges and universities. When the higher secondary school syllabus was proposed by the All-India Council for Secondary Education in 1954, many States adopted it straight away even though this was not the intent of the Council. Among other things, this syllabus proposed a considerably altered approach and content in social studies, an approach borrowed from the experience of other countries and supported by Mahatma Gandhi's ideas on education. However, little was done to give the preparation required to the teachers who were to teach it. They did not understand the reason for the change; in many cases

they did not have the knowledge or the skills to implement it the way it was intended; and in most cases they felt no need for the new approach. In other words, they were in no way ready for this innovation. Not only were the teachers not ready; for the most part educational administrators and supervisors were not prepared, and parents were confused and afraid the new course would not satisfy university requirements. Even the training colleges did not recognize the change-over, and today in some States where integrated social studies has been accepted officially the training colleges continue to teach methods which do not recognize the peculiar needs of social studies teachers. Over the years many workshops and seminars have been held on the teaching of social studies but they have been inadequate in kind and quantity to give teachers understanding and to develop motivation for the task. As a result, integrated social studies have been judged a failure. Actually, they have not failed; they have not really been tried under conditions that would make success possible.

The approach of the University Grants Commission to general education, which is comparable in many ways to integrated social studies, has been different. Much has been done to investigate, to study, to propose, to discuss, and to try out the programme. Many individuals and teams have travelled between India and the United States where there has been considerable experience with general education. The movement has not been universally accepted; but it has not died either. Some colleges are going ahead with it on their own terms and the UGC continues to give support to experimentation, but they are not forcing it. They are not suggesting that universities require their staff to introduce this curriculum innovation. They, and thinking university officials, recognize that general education represents a profound change in the way the social sciences and the sciences are to be taught. It is not just a re-arrangement of subject matter. It requires a penetrating grasp of the disciplines which few teachers have. It requires a concept of knowledge, a depth of inquiry and an approach to analysis of information, a set of purposes of learning, a psychology of learning, and an approach to teaching methods, all of which are alien to the background, values, training, instinct and habits of most college and university teachers. It is a radical innovation requiring changes that

few would be able to digest successfully in a short period of time. To force it would be to corrupt it, to twist its intent, to frustrate its purposes, to kill it. Therefore, wisely, the UGC is following a pragmatic approach, letting each university work out its own plan, subject only to the advice of those who have thought most about general education. Support is given to any variation which represents careful thinking and a serious attempt to experiment.

To cite another illustration, the current programme of summer institutes for secondary school and college science teachers may make a major contribution to readiness for a reoriented curriculum of science teachings. Much more is needed than the summer science institutes to make this innovation effective, but they represent an attempt to prepare teachers for a new approach, to build readiness.

RECOMMENDATIONS

The above may be more than is required to suggest the priority that should be given to discovering and building readiness for new ideas, practices and programmes. The recommendations which follow will serve to summarize many of the suggestions for action made in this chapter, and to add others.

Assess Readiness

1. As part of the procedure for formulating plans for any major project, scheme or innovation, studies should be made to find out the degree to which the State and local situations are favourable. Such studies should search for felt needs and locally recognized problems to which the new programmes would contribute. Particularly, attempts should be made to discover the potential interest of leading members of groups and institutions to be touched by the innovation. These studies should be designed (a) to analyze the ways in which the new scheme will support or come in conflict with the means in use for satisfying individual and group social, psychological and material needs; (b) to assess the kinds of preparatory steps required to build understanding of, identification with and acceptance of the new project; and (c) to determine the additional knowledge and skill required by those who will implement the innovation at the State and local

levels, and those who will actually use it in their day-to-day work. The results of such studies should be reflected in the steps planned to capitalize on the readiness that already exists and to build additional motivation as needed.

Decentralize Planning

2. Plans for the introduction of any new endeavour should be staged in such a way that a wide variety of key people at State and local levels are involved in planning and adapting the suggested programme to local needs. This involvement will contribute to readiness to accept and support the innovation when it is actually launched. It should break down some of the fear normally generated by schemes promoted by Central agencies. It will also help to bring the programme in line with the local situation and the thinking of those who should eventually accept and implement it.

Emphasize Process

3. Central Planners of major changes in educational programmes should concern themselves with the *process* of introduction and implementation as well as, or possibly more than, with the specific answers to educational problems. In the first place, needs, problems and situations vary widely throughout India. In the second place, regardless of how appropriate the specific elements of the plan may be, the way in which *it is introduced* to State officials, and in turn by State and local officials, will spell success or failure. Motivation, readiness and local adaptation are often given low priority in introducing educational change, and State and local officials and institutions may need help more on these matters than on the form and content of improved educational programmes.

Build in Flexibility

4. It follows that centrally planned development projects should be planned with all necessary flexibility to make possible their introduction and administration in terms of State and local variations. It may be necessary to work toward uniformity among the States regarding certain aspects of educational organization, structure and programme, for the sake of efficiency, national integration and the maintenance of standards; but, within the minimum of uniformity, flexibility and variety should be

encouraged wherever it can be justified. This will make it possible for educational leaders at all levels to contribute creatively. It will make it possible to adjust programme content, procedure and timing to local conditions of readiness. It will make it possible to move ahead with some States or institutions which are prepared, and to wait for or to create readiness among those who are not prepared.

Remove Major Blocks

5. Maximum attention should be given to finding at least partial answers to the major blocks which stand in the way of readiness to change among university, State Department, training college and school personnel. For instance, an all-out effort should be planned to increase job-satisfaction and morale among educational workers. This is not just a matter of money; it is also a matter of human relations, personnel policies, methods of administration and kinds of recognition and rewards given. It is essentially a matter of building respect for leaders based on performance rather than hierarchy. Constructive substitutes must be found to replace such vested interests as private tuitions, income from the examination system as it now operates, and social status based on position and level of authority. The economic and psychological needs served by these devices cannot be eliminated; however, ways of satisfying them may be devised which are less blocking to progress, and appropriate assurances should be given to those concerned. In particular, ways must be found to cut through the authoritarian pattern of educational administration in which little encouragement is given for initiative, creativity and experimentation. These and other major inhibitions on change-proneness must become subjects of serious research, experimentation and planning.

Base Plan on Empirical Evidence

6. Wherever possible, proposals for modifications should be based on experimentation, try-out and demonstration. Those expected to accept a new programme must be given some assurance that it will work, that it is feasible, and that the results of the change can be digested by the educational system as a whole. This may require try-out in one State, or in selected institutions. Educators have a right to see the evidence, to talk

with people who have experienced the innovation, and to be prepared for the expected problems which may result as well as the possible successes. This kind of demonstrable experience with new ideas will probably not be obtained in "model" institutions set up by Central or State authorities. Such institutions usually become just further stereotyped, routine examples of uncreative formulæ. Such experience is more likely to come from carefully planned and evaluated experiments carried out in a variety of typical, on-going institutions, making use of the average run of personnel and resources. Leadership for such experimentation should come from such institutions as the National Institute of Education at the Central level, the State Institute of Education at the State level, and extension centres at the local level. Proposals based on demonstrable experimentation and try-out under normal conditions are more likely to be acceptable to the day-to-day practitioner than those based on experimentation in "model" institutions.

Focus on Development Agencies and Administrative Procedures
7. Central agencies should give high priority to helping State authorities to bring into being institutions, programmes and administrative procedures which make possible recognition of factors of readiness in promoting educational development. They should help to train personnel to staff these institutions and programmes. Until recently, the States have had few improvement agencies, poorly and improperly trained staff, and no traditions to follow in doing development and improvement planning. Among other things, the Centre may give help in experimenting with new administrative rules and regulations which are appropriate for educational programmes and which provide the flexibility necessary for encouraging initiative and creativity among inspectors, headmasters and teachers. Rules and regulations appropriate for government workers in general are not always appropriate for educational workers. If it is recognized that the quality of education is almost entirely determined by what the teacher does in the classroom on his own initiative, it follows that procedures must be followed which stimulate dynamism and creativity in the teacher, and such procedures are not the ones normally used in administering Government departments.
· The beginning that has been made in establishing a number

of State development agencies, including the newly formed State Institutes of Education, should be given every appropriate assistance and encouragement by Central agencies.

State Initiative Needed

8. States should not only resist the domination of Central Government agencies; they should also exercise their independence by aggressively encouraging development programmes which recognize factors of readiness. They should give every encouragement to their own development agencies, and to universities, training colleges and schools, to experiment and to innovate. State governance of State Colleges and schools is formal, and is not casual; but it is neglectful of development needs. The State Department of Education is not an innovative body; it is an administrative body and is therefore conservative. Its task is to keep things running smoothly. This is facilitated by uniform standards, procedures, curricula and examinations. The effect is to discourage experimentation and change. One way to overcome this weakness is to pass on improvement responsibility to others, affiliated and independent agencies, and to encourage them in their work. Another, and a needed concomitant of the first, is to build flexibility into its rules and regulations and the application of them, so that the development programmes carried out by other agencies are not hampered.

Improve Readiness-consciousness among State Personnel

9. The approach and procedures used by State Department supervisory personnel should more adequately recognize factors of readiness. This applies to personnel of the State Department itself, regional and district education officers and inspectors. In their visits to colleges and schools they should seek out felt needs of administrators and teachers, they should help to plan innovations and experiments based on these felt needs and local interests and initiative. They should adjust their expectations to the readiness of teachers. They should give recognition to those teachers who are creative and imaginative in their work. They should build a relationship with educational personnel which is based on sympathy, understanding, assistance and recognition of individuality, rather than on fear of punishment and respect for authority alone. To bring about this reorientation of approach

the State Department should take aggressive steps to promote experimentation and research on the problems of supervision, to organize appropriate training for supervisors, and to bring university social scientists actively into the planning and discussion of improvements in administration and supervision. They should also seek the help of appropriate Central agencies charged with the responsibility of study and experimentation in this area.

Provide Balance Between Uniformity and Diversity

10. In administering and financing schools and colleges, the State Department should provide for a balance between the practical call for uniformity, common standards and efficiency, and the need for freedom to respond to variations in readiness, initiative, need and condition. Individual persons vary in their ability, ambition, motivation and recognition of problems. Schools and colleges vary in their readiness to move ahead. To administer institutions in such a way that these variations are ignored is to kill those very forces most able to push forward the frontiers of education. Progress is not achieved in a government office or in a research agency. Both can encourage and assist progress, but the actual work must be done in the schools and colleges themselves, and freedom and assistance given to enterprising leaders and innovators in these institutions may do more than any other step to promote educational growth.

The recommendations discussed above apply specifically to State, Central and regional educational organisations. In spirit they apply to the individual agent of change also. Implications specifically for him, however, will be discussed in Chapter 6.

SUGGESTED READINGS*

1. Dubey, 1958.
2. Johns, 1953, chaps. 6, 7 and 10.
3. Lionberger, 1960, chaps. 8 and 9.
4. Lippitt *et al.*, 1958, chap. 4.
5. Mann & Neff, 1961, pp. 5-24.
6. Prasad & Juyal, 1966.

* The books referred to in this list are included in the select annotated bibliography appearing at the end of the book.

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Dynamics :
A Close Look at the Process

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I claim for them [experiments] nothing more than does a scientist who, though he conducts his experiments with the utmost accuracy, forethought and minuteness, never claims finality about his conclusions.... One claim I do indeed make and it is this: For me they appear to be absolutely correct, and seem for the time being to be final.... But at every step I have carried out the process of acceptance or rejection and acted accordingly.

— MAHATMA GANDHI

GENERALIZATIONS

THE following generalizations about change dynamics will be discussed in this chapter:

1. Planned change has a direction which is constantly subject to reconsideration and reorientation; the effective guiding of the direction requires understanding participation by persons at all levels in planning, evaluating and replanning.
2. The means used to accomplish development, as well as the goals, aims and objectives, are important aspects of change dynamics which influence the quality and direction of change.
3. The process of change usually takes place in stages, each stage growing out of and building on the experience of earlier stages.
4. Individuals differ in their tendency to initiate change, and in their rate of acceptance of innovations.
5. The initial acceptance, and the maturation, diffusion and full integration of an innovation into a culture requires

    exposure to change programmes of critical concentration, sequence and continuity.

6. Innovation in any one element of a culture tends to create disharmony and to stimulate interaction between the altered element and its setting, necessitating mutual accommodations.

7. The forces of formal and informal group dynamics are powerful influences for or against change.

8. Frustration resulting from unsuccessful attempts to assimilate or to promote change often leads to the adoption of false symbols of change as protective devices.

INTRODUCTORY COMMENTS

Social dynamics has to do with the forces at work within a society or an organization, the patterns of operations of these forces, and their interaction. The laws of social dynamics may not be as predictable as the laws of physics, for example, but the research of social and behavioural scientists increasingly reveals guidelines which can be used in planning programmes intended to bring about change in human behaviour.

Obviously, discussion of social dynamics is not limited to this chapter, for factors of readiness and culture already discussed and factors of leadership and group support discussed in the next chapter also bear on the question of social forces. In this chapter, however, we wish to highlight certain generalizations which describe how social dynamics affect individuals and groups involved in developmental change, and to illustrate these effects in the context of the improvement of educational programmes and institutions.

As stated in Chapter 2, social scientists give us a number of models representing how change takes place. One model suggests that change takes place when the forces favouring a particular innovation become stronger than those opposing it. Another model suggests that change results when an individual, a group of people or an organization recognizes a problem and succeeds in finding a solution. Another model suggests that change occurs through the borrowing of ideas and practices from people of other societies or cultures. Still another is that, within an organization, group or society, some people or institutions move

out ahead of the rest who, eventually, imitate the innovators and general change occurs. Undoubtedly, these and other models of the change process are descriptive of the complex dynamics of change, all of the processes operating simultaneously in various segments and on several dimensions of society. Regardless of the model of change dynamics that seems appropriate in each situation, the task of the promotor of change is to stimulate, reinforce and promote those social forces and activities which seem to promise successful movement in the direction of development goals, and to discourage those which do not. To do this with some skill, participants in development programmes need all the knowledge and understanding available on the dynamics of change and to be sensitive to principles of social interaction.

More specifically, administrators and planners need sophistication in change dynamics so that their plans will be more reliable as a guide to development work. Agents of change need understanding and skill in providing day-to-day assistance to innovating practitioners in the field. Practitioners themselves should be aware of dynamic factors to increase the intelligence with which they analyze their own procedures. The ideas we will discuss focus on characteristics of successful promotion of change, or on unsuccessful efforts to promote change to emphasize by contrast, rather than on the undirected evolution of change that takes place without the guidance of planning and leadership in the direction of a set of goals.

Significant Change is Qualitative

To understand the dynamics of successful change it is important to understand the kind of change we have in mind. A school headmaster may become convinced that he should be more democratic in running his school so he decides to hold staff meetings more frequently. This is a change in frequency. It may contribute nothing to more democratic administration unless the nature of the headmaster's relationship with his staff is changed so that they actually contribute to school decisions. It may be a quantitative rather than a qualitative change. Such a change in procedure may be a necessary step towards significant change but by itself it does not constitute the kind of change we have in mind.

Or, an inspector may want to encourage teachers voluntarily to request help in their teaching. Realizing that they are hesitant to

admit their weaknesses to him, he may use a questionnaire through which they can anonymously suggest ways in which he can assist them. This is a change in technique only. The qualitative change the inspector wants takes place when a teacher uses the new technique to ask for help, for the first time, with the sincere desire to improve his work.

To take another example, a school may introduce the use of cumulative record cards. This is a change in procedure. As indicated in Incident C in Chapter 3, the qualitative changes necessary to make use of the cumulative record system do not follow automatically on the introduction of the card system. Significant change has not taken place until teachers and administrators change their values and attitudes relative to education and change the handling of students in such a way that they make use of the cumulative record cards for the guidance purposes for which they are intended.

Mechanical or procedural changes may make possible qualitative change but they do not constitute it nor do they necessarily assure that it will take place. Qualitative change takes place when clients develop the desire to change, go through personal introspection, study and experimentation, and modify their behaviour in meaningful ways. Where the individual who goes through this conscious process is a part of an organized group, such as the staff of a school, his modified behaviour and that of his associates will interact in such a way as to bring about organic change in the nature of the programme of the organization. Change programmes which do not fully recognize qualitative, organic change as their goal often result in change in name only or in form only. This may be part of the explanation of the fact that during the past fifteen years literally thousands of Indian teachers have attended seminars, workshops and training courses on social studies, examinations, English teaching and many other topics, with little actual impact on their day-to-day work.

Unfortunately, much of the discussion of innovations and diffusion of innovations has not been adequately concerned with the actual educational results of the mechanical or procedural changes, many of which do not penetrate deeply and do not last. Educational television is a case in point. In the United States and other countries where this teaching device has been promoted, there is growing concern over the actual, qualitative contribution

made to teaching through television. It is one thing to be satisfied that a large number of schools have at least one television set and use it on some occasions, or that one or a few teachers make use of it regularly. It is another thing when the use of *television is diffused* within each school to the point where it is used appropriately by all teachers who potentially should make use of it. It is still another thing when television is used in such a way that it brings about significant qualitative improvement in the work of all teachers who use it. It is this qualitative kind of change with which we are concerned in this book.

In distinguishing between surface change and qualitative change the story is often told of a Pacific Island community which experienced large-scale contact with the American army during World War II. It is said that before the war it was an accepted practice for wives of the islanders always to follow their husbands when the two were walking through the village or the fields. Following the war it was observed that wives often preceded their husbands. Some observers readily concluded that contact with Americans had resulted in a fundamental change in cultural values that the wife no longer was considered to be an inferior being who followed behind her husband of higher social standing. Closer study of the change revealed, however, quite a different reason for the new procedure—the village roads and the surrounding fields were still full of explosive mines left over from the military action! This change in procedure, obviously, did not result from nor represented a qualitative change in values as first thought.

INCIDENT A

In one teacher training college, because of certain traditions and leadership of high quality, the faculty took very seriously their responsibility to carry out a full programme of extension work for secondary schools. They did so realizing that experience in assisting secondary teachers should lead to improvement in their own training of future teachers in the training college. From time to time the relationship between in-service projects for secondary school personnel and the training college programme was discussed in staff meetings.

One of the newer faculty members was interested in trying a method of evaluation to find out the extent to which participation in extension programmes led to actual changes in the college programme or in teaching methods in the college. He had learned of the method at a workshop on

evaluation and had subsequently studied reports of groups of teachers who had used it in the United Kingdom. The method required each faculty member to keep a diary, and periodic analysis and discussion of the recorded changes in teaching method or content, if any, in staff meetings. This staff member discussed this technique with two of his friends; they saw the advantages and seemed interested in trying it.

A few weeks later the extension programme was once again on the agenda at the staff meeting and the diary method of evaluation was suggested. In the discussion that followed the two friends of the person suggesting the technique and one other spoke in favour of trying it; all others were either sceptical or opposed. Two of the older staff members reported that a similar impractical idea had been suggested *before* but never tried. Others thought it would take too much time. One staff member in particular expressed unwillingness to discuss his teaching *methods openly in staff meetings; others* seemed to agree on this point. All agreed that improvement in their teaching should be evaluated; the question was how to do it? The staff member who suggested the new method was discouraged with the discussion, but he volunteered to try it himself. The principal, who was interested in using the method as a way of encouraging the staff to talk openly about their experience and problems, asked if the faculty would be interested in having a committee to observe and evaluate the experience of the one innovating member. This was generally agreed to, although a few did not say anything. The principal appointed as chairman one of the two friends of the innovator, the third *person who favoured the idea, and a senior staff member who opposed the* idea and who was considered something of a spokesman for the older faculty members.

The committee met twice, with active discussion, including some critical questions and comments from the older member. At the third meeting all were surprised when another committee member presented his own diary for discussion. At the next staff meeting the work of the committee was on the agenda. This led to discussion of the quality of the extension programmes; the extension coordinator suggested several ways in which greater cooperation from the faculty would be helpful. One other faculty member volunteered to join the *evaluation committee* and to keep a diary for discussion. Several members who had opposed the new evaluation technique when it was first discussed repeated their opposition, but their comments stirred little reaction in the face of the actual experience of the committee which indicated how the technique could be helpful.

The work of the committee continued over the next several weeks with a considerable amount of informal discussion going on among small groups. *At the next staff meeting* two other faculty members came forth with a tentative plan for improving the work of the science and social studies clubs they had helped to establish in several schools. In the course of discussion of their plan the principal asked whether these two members would be interested in trying a similar kind of evaluation technique covering not only the success of their idea for improving the school clubs but also covering how the work with the clubs affected the methods

papers they taught to prospective science and social studies teachers. They were hesitant, indicating that they had not thought much about evaluating their plan. The chairman of the evaluation committee invited them to meet with his committee to discuss the diary technique and this was agreed to. In due time these two members added the technique to the plan of the project to improve school clubs, and discussion of their experience was included in subsequent staff meetings.

In this way, from time to time the principal and others suggested ways in which the new evaluation technique could be used, and the faculty gradually accepted this innovation. The teacher who suggested it in the first place ceased to be discouraged, and the principal reflected favourably on his early decision not to force the acceptance of the innovation nor to abandon the suggestion just because a majority initially opposed it.

What generalization about change did the principal follow in his decision on how to handle his staff? How might the staff have reacted if the principal had imposed the new evaluation technique on all at once? What were some of the dynamic forces at work in this faculty which conditioned their reaction to the new idea?

INCIDENT B

A Divisional Education Officer decided to try a scheme to make more efficient use of the clerks and stenographers in his office. Instead of assigning each clerk or steno to a given inspector they would all be put in a pool with one senior person in charge of assigning the work that had to be done for all the inspectors. The DEO had learned of the idea from his study of school administration in the United States. Through the new method he hoped to get more efficient work out of the office staff, making it possible for one or two persons to be assigned to special projects he planned to introduce for the improvement of administration of school supplies. It would also make space available for the new projects. He discussed the plan with the inspectors; most were willing to try it, although several were sceptical.

The clerks and stenos, however, were very much against the plan. They not only feared the loss of free time when the work-load of their inspector was light or he was on tour, they also feared the loss of status that comes from being personally attached to a prestige person. They were sure that their standing would go down in the eyes of the peons who were not serving in a pool system. At lunch time they were accustomed to meeting with office personnel from other nearby government offices. These friends were assigned to individual administrators, and they were hesitant about how this change would appear. In addition, they felt that they would not get the same kind of treatment most of them now received from a superior who contacted them frequently and got to know them; promotions might not be so easily obtained. Although the clerks and stenos discussed their opposition among themselves, few of them said

anything directly to their superiors. The DEO went ahead and introduced the new system. After a time he could see that it was not working well. The morale of clerks and stenos declined. The inspectors complained about the quality of work done. They thought their authority over the office staff was weakened. Cooperation was not readily forthcoming on special tasks. The staff of the new projects found it particularly difficult to get their work done without interference of one kind or another. In time, the DEO had to abandon the pool arrangement and go back to the old method.

Might it have been possible for the DEO to anticipate the reaction of the office personnel? In what ways could the situation have been handled so that the new arrangement might have been accepted? Are personal matters such as prestige and status important in introducing change?

The Incidents described above will be referred to later on in this chapter. We wish only to point out here that they illustrate what happens when the administrator takes into account predictable dynamic factors and what happens when he does not. In spite of the fact that these incidents are oversimplified, they may help to make more meaningful some of the generalizations about change dynamics which follow.

DISCUSSION OF GENERALIZATIONS

Direction of Planned Change

It goes without saying that each planned change programme has goals. Each programme is based on a logic, it has a basic purpose and rationale. It is usually part of a larger plan and it fits into the overall programme for the development of an organization, a community, an aspect of the economy, a state or a nation. It is intended to help accomplish something thought by the planners to be necessary for a better life. In other words, planned change has a positive direction, if the planning has been well done, and therefore it is desirable.

In one sense it is better to say that planned change has a direction than to say that it has aims or goals. The former implies that change is a continuing process; the latter may imply that change is accomplished when goals are reached. The major theme of this book is that change is a continuing characteristic of all societies and all cultures; planned change is not different in this respect. In other words, change is a process, not an end objective.

DYNAMICS: A CLOSE LOOK AT THE PROCESS   113

The so-called underdeveloped countries often think of their goal as being that of achieving economic and social living standards found in the more advanced countries. Towards this goal a tremendous amount of effort is put into a variety of development schemes. It is often forgotten, however, or not fully recognized, that the so-called advanced countries are currently going through more rapid change than the underdeveloped countries. Some of their economic goals of development have been achieved for most of their people and they are now concerned with problems of leisure unemployment caused by automation, how to get to the moon, or how to put back into life some of the meaning that may have been lost in the process of satisfying the basic economic needs. So planned change has a direction rather than a final set of goals. Perhaps it is helpful to think that long-range goals indicate the purpose of planning, that interim or intermediate aims provide the theme of individual development projects, that specific objectives provide the day-to-day focus of activity, and that all of these several levels of planning indicate the direction of planned change.

In the field of education this way of thinking about planned change can be illustrated as follows: the long range goal of educational development is to make education of appropriate quality and adequate quantity available to all the people of India; intermediate aims intended to contribute towards this long-range goal include the introduction of higher secondary and multi-purpose secondary schools, the initiation of basic education, the opening of a certain number of primary schools each year, and the provision of textbooks for all students; more specific day-to-day objectives include the writing, publication and distribution of a pamphlet on methods for teachers, the starting of science hobby clubs for elementary students, the establishment of effective student governments in secondary schools, the introduction of internal assessment in universities, and the improvement of the teacher training curriculum in primary training colleges. All of these levels of planning must be carefully coordinated if they are to add up to an integrated direction for educational development; such coordination is part of planned change.

Another basic theme of this book is that development is an internal process, internal for the people working on development at any level. Role of leadership and stimulation is provided by

administrators and agents of change at the various levels in the hierarchy, but the process itself, to be successful, must very thoroughly involve the clients themselves; change can seldom successfully be imposed from above. If this idea is taken seriously, it means that the direction of development must be understood by all persons involved in change programmes, including the long-range goals, intermediate aims and specific objectives. Furthermore, it means that the direction itself must be subject to influence by all persons involved. They must help establish the direction and they must play a role in desirable modification of the direction, based on their experience in trying to implement the goals, aims and objectives included in the direction.

To put it more succinctly: (1) *Planned change has a direction which is constantly subject to reconsideration and reorientation; the effective guiding of the direction requires understanding participation by persons at all levels in planning, evaluating, and replanning.* The Incident described below will illustrate what this generalization means in practice.

INCIDENT C

An extension coordinator had a particular ability in improvising science teaching equipment and in training teachers in its use. He built his extension programme around the establishment of science clubs and the training of teachers in making and using inexpensive equipment and materials in the club activities and in their regular teaching. He gained a considerable reputation for his work in this area and to a large extent his central science club, training courses for teachers and personal assistance to individual science clubs became the standard core of his extension programme. From year to year he planned the programme himself, cursorily consulting the principal of his training college who was not particularly interested in extension. Sometimes he ignored programmes suggested by the national leadership because of the high priority he wanted to give to his special interest. He used no techniques to evaluate results based on teacher reaction. He sent out circulars to schools from time to time and waited for them to respond to the programmes he had planned.

In recent years he noticed a certain falling off of interest on the part of teachers and headmasters; he rationalized this as being caused by the increasing indifference of teachers generally and the pressure for examination results.

When an assessment team visited this extension centre they questioned the coordinator on how his programme was planned, among other things. The coordinator was not defensive when asked why the advisory com-

mittee had not been involved in planning, but he showed an almost total lack of understanding of the reasons why such involvement might be related to the schools' weakening interest in his programme. The assessment team met with a group of headmasters. In the discussion it became clear that the headmasters were appreciative of the work that had been done to train teachers in science club management and the use of improvised laboratory equipment. At the same time they indicated that the time had long since passed when a considerable change in emphasis in the extension programme was needed to make it effective. Integration was obviously needed between the kind of science teaching dictated by the syllabus and the examination system, and the kind of science learning implied by the use of laboratory equipment and by science club activities. Teachers continued to keep the two separate.

The assessment team met with the staff of a secondary school—the school considered to be the best in the city. The chairman of the assessment team began the discussion with a brief description of the assessment programme and then posed the question: On what kinds of problems did the teachers feel a need for help? The teachers looked at each other, seemed puzzled by the question, but no one responded. The chairman put the question another way: What kinds of programmes should the extension centre provide for schools? Again there was no response, although it was obvious that some of the teachers wanted to say something. The chairman, sticking to his desire not to give a lecture but to draw out the staff of the school, stated his question a third way: What should be the purpose of an extension programme for secondary schools? How should that purpose be decided? Finally, one of the teachers spoke. He was obviously one of the older teachers in the school. He said that never before had anyone asked them what help they needed from the extension centre. They had never been involved in helping to plan the extension programme. He did not know for sure, but he doubted if the headmaster had been asked either. The programmes that had been carried out might have been very worthwhile, but they did not deal with the problems the teachers felt to be the most important. As for him, he wanted help on how to handle the increasing number of students he found in his classes each year—up to fifty-five in some cases. He felt the training college, through the coordinator, should be able to shed some light on this problem. The comments of this older teacher broke the ice and others joined in the discussion. One teacher felt that the recently revised geometry syllabus created several teaching problems on which most teachers needed help. The headmaster spoke up to say that he felt the timetable prescribed by the State Department did not meet the needs of his school and that he, and he felt other headmasters would like help on working out improvements. Several other specific suggestions were made, but the overall tenor of the discussion was that participation in planning the programme of the extension centre was necessary if the extension activities were to be really worth while. No request had been made for their ideas in the past and no opportunity had been provided for them to evaluate what had been done.

What was apparently wrong with the extension programme carried out by this coordinator? What techniques might the teachers' and the headmasters' interests have contributed continuously to the redirection of the programme? Why were the teachers so hesitant in responding to the questions of the chairman of the assessment team?

The above Incident indicates what goes wrong in a change programme which makes no provision for clients to participate in setting the aims and objectives of the programme. On the other hand, Incident A, described in the introduction to this chapter, gave some indication of how the involvement of clients can be handled by an administrator who is sensitive to the dynamics of social change. In the latter case, acceptance of the diary technique of evaluation on its merits was possible because the principal of the college provided for discussion of the method in relation to problems felt to be important by members of his staff. In the former case, the Incident described immediately above, no such opportunity was provided by the coordinator, potential clients had no opportunity to help shape the purposes or content of the programme, and so their participation did not bring actual change of significance. What we are saying is that the dynamics of successful change programmes includes interaction among persons at all levels in shaping the aims and objectives, even in altering the overall direction of change and development.

Of course, by themselves, the clients do not set the direction of change programmes. Nor do the agents of change or the local administrators. The coordinator in Incident C made the mistake of doing most of the planning by himself. This has been too often true in India. In some cases principals of colleges have behaved as autocrats who did not listen either to their staff or to the national leadership of the Department of Extension Programmes for Secondary Education. In other cases, the national leadership has not sought ideas from either the principals or the teachers and headmasters of schools. Sometimes programmes have been planned at the national level and sent down to the coordinator to carry out. None of these three examples reflect what ought to happen if change programmes are to be effective. Rather, a continuing system of planning should be organized which gives persons at all three levels, national, college and school, a chance

to participate. Not only should the opportunity be provided administratively, the entire way of working should encourage such participation and make it seem a natural part of expected behaviour. And, of course, the state administrators of the schools should be included in the dynamics of goal setting, evaluation and reconsideration of any programme intended to improve the schools. The agent of change should be particularly sensitive to the need for such broad-based and coordinated participation in developing the direction of extension programmes. Such de-centralization of planning is not new to India, theoretically. It is new as far as actual implementation is concerned, and democracy will not be a reality until broadbased planning is made more effective.

The story is told of some workers who were hired to dig holes in a particular piece of ground. The man who hired them would ask them to dig at a particular spot, he would come and look into the hole and then ask them to fill it up. Then he would indicate another spot for a hole to be dug. This went on for some time, until the workers became discouraged with digging and filling holes. *They expressed their confusion and the employer im-mediately recognized the reason for their concern.* He explained that they were digging holes to find out where the water pipe lay so that a connection could be made for an extension. "Oh!" exclaimed the workers, and they renewed their effort, this time with a sense of purpose. After a short time, however, one of the workers suggested that their digging might be more systematically organized if the purpose was to find the pipe. He explained his idea, the other workers listened in agreement, the employer modified his instructions, and the work was carried on more expeditiously. This story illustrates a point which is applicable to change programmes of any kind—the job is likely to be more purposefully and more efficiently done if the workers understand the purposes and are allowed to suggest how the job might be reoriented in more promising directions. At least part of the reason literacy programmes have not been successful is because the clients were not involved in the planning and they did not appreciate the long-range purpose; in fact, in many cases the goals set were unrealistic and no means were provided for altering the goals in response to the ideas and feelings of parti-cipants.

Two major weaknesses often characterize development planning. One weakness is that planning is done by a group of top administrators with little attempt to tap the ideas of persons who will be directly affected. A second weakness is that the plan developed is considered to be a "Bible", a master-plan which cannot be altered until another high-level group is appointed to review it. These characteristics of planning fail to recognize that far too little is known about human beings and their reaction to even a single important social change to make possible an infallible plan outlining the pattern of development of that one change over a period of time. The replanning of national development every five years recognizes this fact, providing that adequate flexibility is allowed for changes during each Five Year Plan period *and* the necessary machinery and procedures are built into the plan to "institutionalize" constant evaluation and reconsideration of aims and objectives by persons at all levels.

In the absence of authorized procedures for periodic replanning based on experience, a plan can soon become a hindrance rather than a help. This may be true, for instance, of some of the plans for educational development based on the report of the Mudaliar Commission. This report called for the establishment of multipurpose higher secondary schools. Not only state planning of the conversion of high schools to higher secondary schools was based on the report, but also national schemes for supporting the creation of multipurpose secondary education and the training of teachers were planned, financed and launched. Early experience with higher secondary schools raised serious questions in the minds of some practitioners. As time went on many became convinced that the scheme was impractical without significant changes in universities, in the public expectancy of secondary schools, and in the labour market. In due course a rather general discontent with the plan developed, but the plan continued anyway because there was no way of stopping it or altering its direction. This state of affairs continued way beyond the point at which the scheme should have been reconsidered. Such a situation would not have developed if the plan itself had included machinery and procedures for periodic reconsideration by those involved at all levels in implementation.

The recent Education Commission may have solved some of the problems of planning by travelling around the country and

by their emphasis on implementation as well as goals. Their emphasis has led the Commission to spell out in great detail what each of their recommendations would mean in practice, even to costs. This approach should result in fewer ideal, impractical, general recommendations which so often find their way into the work of similar commissions. If this is true then the emphasis of the Commission on implementation is good. If, on the other hand, the detailed recommendations are treated as a master-plan, the results of their work could turn out to be even more inhibiting of successful change than the work of similar groups who have made only general recommendations. Emphasis on implementation could take another form. It could result in unusual concern for the *process* of implementation, for the process of change, if you will. It could mean giving considerable attention to ways of working, principles of change dynamics, the problems and processes of culture and value change, reoriented administrative and leadership procedures, and ways of involving all levels of people in continuing evaluation and replanning of the direction of change. To draw up a workable plan for an improved organization and programme, and to fail to spell out guidelines as to ways of organizing and supervising the human effort required to implement the plan successfully, is to neglect the most important aspect of implementation.

Direction and Means

This leads us to present another generalization as to the dynamics of the change process: (2) *The means used to accomplish development, as well as the goals, aims and objectives, are important elements in change dynamics which influence the quality and direction of change.* Let us look at several examples. One of the long-range goals of Indian development is a mature democratic system of government. Toward this end many political and educational programmes exist to prepare citizens to play their rôle in a democracy. If autocratic means of promoting these programmes and administering political and educational institutions predominate, then these means detract from the intended achievement of democratic attitudes and skills among citizens. To be more specific, schools in a developing democracy share responsibility for training the youth to participate democratically in the operations of society. If the means of running the school

contain few elements of democracy the students are not likely to leave the school with orientation towards or training for democratic behaviour. There is an even more tragic contradiction in the school with an apparently active student government which, on investigation, is found to be run in every detail by the head-master and teachers. Democracy in form only adds to cynicism towards democracy; it adds little to the democratic direction of education. One of the authors visited a school recently which was well known for its student government. The government was patterned after the British parliamentary form. On short notice the student parliament put on a show of parliamentary debate that was animated, heated and yet handled in good order. It made a good show for visitors. Several probing questions from the visitor revealed, however, that questions and answers were memorized and procedures clearly specified in detail in advance by the teachers in charge. Furthermore, this student parliament never debated real school issues. They played no part in the running of the school. In every sense this student government was an artificial organization. Such sham democratic forms are likely to contribute little to the development of democracy; they probably detract from this purpose.

Another long-range goal of Indian development universally agreed to by development planners is to reduce the extent to which authoritarianism permeates the culture. One way of contributing to this goal is to build non-authoritarian methods into development projects themselves. Involvement in planning previously discussed is one such means. Another is to provide channels of communication between persons at lower levels and administrators of projects such that the results of experience become a recognized contribution to the replanning of the project. Still another is to make sure that results from the improvement project provide early benefit to persons at the various levels in the hierarchy. Democratic human relations, giving credit where it is due, stimulating creative thinking at all levels, and using democratic group procedures in meetings, are other means for de-emphasizing the value now placed on authority and authoritarian patterns of behaviour. These matters were discussed in Chapter 2. Our purpose here is to underline the point that the use of non-authoritarian means in development programmes may be the best way to reduce the automatic accept-

ance of authoritarianism as a cultural value.

In Incident *A* above, the principal of the training college wanted to increase discussion and self-appraisal among his staff. He recognized that the suggestion of using staff diaries as a basis for self-evaluation could contribute towards achievement of this aim. He could have yielded to the all-too-common tendency to impose the new evaluation scheme on his faculty. He chose otherwise because. he realized that such an autocratic means would not contribute to the desirable end; in fact, it probably would have made it even more difficult to increase free discussion and self-criticism.

A word of caution is in order here. The change from autocratic patterns to methods more in keeping with development goals is not easily accomplished. Any attempt to make the change too abruptly is likely to lead to confusion and chaos, and democracy will be unjustly discredited. Premature attempts to introduce student government without the patient, careful development of attitudes, skills and traditions necessary for it, among staff as well as students, are likely to be unsuccessful. Attempts to introduce democratic procedures in adult groups accustomed to domination by the chairman are likely to produce chaos and little will be accomplished. As will be discussed later, successful change is usually accomplished in stages, allowing for individual persons to develop changed attitudes, values and skills gradually, over a period of time. A step-wise programme of change, where the steps are carefully timed and phased, will allow for progressive growth in the ability to use and react constructively to means appropriate to the long-range goals of the country.

Another word of caution may be necessary. When we speak of democratic means we recognize that to some people the term connotes complete freedom. Democracy implies democratic government, among other things, and democratic government is still government. Government of any kind involves leadership responsibilities and administrative structure, regulations and authorized procedures. In any organized group or society the individual person cannot do what he wants without taking into account the rights of others and the organized procedures which are necessary for orderly living together. Our definition of democracy includes these elements as well as the organized procedures through which all persons can exercise their influence

on the formation of policies (on the goals and direction of change, in this case) and can take part in electing officials and deciding key issues.

Other examples of the relationship between ends and means can be found in in-service training programme for teachers. If such training is given through lectures alone, with no opportunity for teachers to practice the skills under supervision, little skill will be learned. In addition, tendencies of teachers to lecture will be strengthened and cynicism towards in-service programmes will be increased. Both of these unintended results become a part of the social dynamics affecting the success of other attempts to improve teaching, and the effect is not on the positive side. Still another example is found in workshops emphasizing recognition of the interests and needs of students in teaching. In too many cases these workshops are organized without taking into account the real interests and needs of the participating teachers. This neglect colours the operations of the workshop and builds blocks to learning among many of the participants, in the workshop itself and in other programmes intended to help teachers grow. The ultimate contradiction between means and ends is found in attempts to teach teachers to use group discussion in their classes through training courses consisting almost entirely of lectures.

Contradictions between means and purposes may sometimes be unavoidable due to lack of time, shortage of facilities, and other reasons beyond the control of programme organizers. When this is true, the nature of the contradiction, the reasons for it, and possible negative outcomes should be frankly and apologetically discussed with the clients. Their sympathetic understanding of the inevitability of the contradiction will help to minimize the negative results, even though they come to realize more fully what is being lost through the use of inappropriate means. Promotors of change often become so enthusiastic about their answers to problems that they want to put them into effect immediately, and too often the means that seem to promise greater speed contradict long-range purposes. The only excuse in this case is impatience, and impatience is sometimes the enemy of progress.

Change Takes Place in Stages

As indicated earlier, change tends to be accomplished through

steps or phases. By this we mean that the process through which a given innovation becomes an accepted part of the personality and way of working of individuals, or of organized groups of individuals, is usually evolutionary. Seldom does a new idea or practice become accepted in one step, small or large. Perhaps a better way of putting it is that people who accomplish successful change go through a number of sequential stages in reaching their goal. This latter way of putting the matter is important because it implies that people, not the innovation, go through the steps. This point is often lost sight of in large-scale development projects. Sometimes the planning is done by one group, usually a group of high-level administrators. Try-out or experimentation, if included at all, is turned over to lower-level administrators, and those who are expected to use the innovation may have experienced none of the developmental thinking involved. This is very likely to lead to uninformed, insensitive and indifferent implementation, if implementation takes place at all. The dangers of this way of handling the stages of development can be minimized by indirect involvement in planning and evaluation, and by good communications among all the people who will eventually be touched by the new practice. But the problem remains one to be kept in mind in the planning and steering of any development effort.

Problem-solving Steps. When developmental change takes place as a result of the efforts of an individual or a group to solve a specific difficulty that bothers them, it usually goes through a series of stages which we call problem-solving steps. These steps include awareness of the problem, clarification and definition of the problem, diagnosis of the causes of the difficulty, posing of alternative solutions, trial of possible solutions, evaluation of the results of trial, and acceptance or rejection of the solution or solutions.

Let us take an example. Suppose that discipline becomes a critical problem in a school. Discipline problems always exist but in this case it becomes suddenly a critical matter, and students in large numbers exhibit a belligerent attitude towards teachers. They repeatedly break long-established rules of conduct, they openly challenge the headmaster's authority, they refuse to study regularly, and their combined actions result in such a turbulent situation that effective teaching is impossible. Administrators and teachers

approach has been suggested, now popularly known as "action research". Action research *is no more than problem-solving by a group which follows procedures characteristic of research methodology*. Great care is taken in defining, delineating and focusing the problem. Data are gathered with the use of more scientific tools such as questionnaires, observation and interview. The information gathered is carefully analyzed to shed light on the nature of the problem and its likely causes. The probable causes are systematically identified and listed in priority order. For each cause a series of possible solutions are postulated, and try-out procedures for each are planned. In a systematic order all the possible solutions for a cause are tried until the correct solution or solutions are found, based on carefully organized evaluation. If a solution is not found then the same procedure is followed to try-out the possible solutions for another probable cause. This process continues until a solution is found which seems to correct the problem situation.

It is not our intent here to spell out in detail all that is involved in problem solving or action research. Information can be found on both in educational libraries. It is our intention here only to point out that these procedures for successfully bringing about change are made up of stages. They can be particularly efficient in bringing about step-wise change because they involve a group of people in the whole process so that change takes place in the people as well as in the situation. In going through the steps of problem-solving, assuming that in the beginning the individuals involved have a real concern for the problem, maximum chances of bringing about changes in understandings, attitudes and behaviour are built in. Another important characteristic of this kind of procedure is that it can become self-generating of other, succeeding changes. Individuals or groups which are successful in solving their own problems will come out of the experience with increased insight into them. They may also be emotionally stimulated by the rewarding experience to go on to tackling other problems. In this way, change stimulates further change—*success breeds success.*

Adoption Stages. Problem-solving is an appropriate procedure for individuals or groups where a critical problem exists and the individuals involved actively want to find a solution. Similar steps or stages *roughly characterize the adoption of new practices*

which are not necessarily evolved as solutions in the problem-solving process but are put forward by an agent of change or an administrator as a better way of doing something. Or, an individual becomes aware of a practice which is new to him through visits to another school, city or country, or in some other way becomes aware of what to him is an innovation. This is an individual rather than a group process and it is similar to the process of learning. The stages are usually awareness, interest, deliberation, trial, evaluation, and adoption.

At the awareness stage, the person is exposed to the innovation. This may come about through action by someone else who brings about the exposure by plan, or it may be entirely incidental. The person comes to know that the innovation exists, that it has certain characteristics and purposes, but he does not know much about it nor is he motivated to find out more. The next stage is that of interest. After some thought, or further exposure, or influence from associates, he wants to know more about the innovation. He seeks more information, he has a general tendency to value the new practice, device or idea, he becomes psychologically- involved with it. In the third stage, the deliberation stage, the individual begins to think about how the innovation might be used by him, how it may relate to his present and future needs, what it might contribute to his personal aims or needs, and what the advantages and disadvantages might be from adopting it. This is a stage of wondering, of mental try-out. It blends into and is followed by the stage of actual trial. In this stage the individual actually uses the innovation, probably on a small scale. This is try-out or experimentation. Adoption depends very much on the results of trial. Evaluation of the trial experience comes next. If the person is pleased with the results, and if he sees the advantages as clearly outweighing the effort required to use the new practice, then adoption follows as the final stage. If the results of trial are not pleasant, or if they are misinterpreted as being unpleasant, the innovation may be rejected. This is a critical stage and the success of the trial depends not only on actual results but on whether they are in harmony with expected results. Even where actual results are potentially pleasant for the individual he may reject the innovation out of surprise that they are different from what he expected.

Although the stages of adoption follow along rather naturally,

they can be stimulated and guided in the direction of successful adoption. Favourable exposure to new ideas and practices can be arranged by change agents. *The individual can be influenced to become interested in the innovation and to view it favourably through demonstrations and information.* Trial can be made easy by the arrangement of facilities and one can be fore-warned of any kinds of results which might serve to scare one away from adoption. In other words, the stages of adoption can be expedited by a sensitive agent of change. There is danger, however, in "over arranging" the situation so that suspicion is aroused that the change agent may try to sell one something he does not really want. Or, the natural flow of the stages may be hurried so much that the individual is not given sufficient time to develop from one stage to another. Where the situation is managed by an outside agent, the individual still has to go through the steps of change himself—he has to change internally before the innovation fits his purposes, his personality and his psychological being, and *becomes fully adopted as a continuing part of his way of living.*

A teacher of English reads about a novel way of handling oral practice in large classes. He pays little attention because he has read about so many innovations in English teaching which seem to him to be impractical. At a later date he witnesses an apparently successful demonstration of the new technique. He becomes interested and asks questions about the method. Following the demonstration he searches for more information in methods texts and journals. He begins to think about how he could use the method to advantage in his own classes. He discusses the possibility with other teachers and comes to the conclusion that he should try it out. He asks for assistance in the preparation of the necessary teaching materials for one of his classes. He discusses the problems and pitfalls of experimentation with training college friends. He carefully plans how the trial will be carried out, discusses it briefly with his students and then makes the trial. Realizing that use of the method in a single class period will not be an adequate trial, he uses it during one period, refines his technique and makes certain corrections based on this first experience, and then continues the trial for one week in the experimental class. At the end of the week he discovers that the method produces results which he wants in the oral teaching of English and he decides to continue the practice in that class and

to introduce it in his other classes. This teacher has gone through the normal stages of adoption.

Adoption experience can also be stimulating of further innovation. The person who tries a new practice and finds it satisfying has probably increased his change-proneness. He is more likely to be interested in other innovations of which he becomes aware. This may be true even though the initial innovation is rejected, providing that the experience has been a pleasant one, with administrators encouraging but not pressuring, with associates following with interest rather than ignoring or criticizing, with the prior feeling that if the innovation is adopted it will in no way decrease but may increase his standing among his fellow-workers. On the other hand, where try-out of an innovation is done under pressure, without support from administrators and associates, with unrealistic expectancies, and in a climate of tension, pessimism and discouragement, even success with the try-out is not likely to lead to repeated innovation.

It should be added that the stages of adoption can be viewed as a cyclic sequence in which the last step is death and disuse of what was an innovation. It is assumed that in many cases what is a desirable innovation today becomes in time an outworn practice which should be replaced by a new innovation. Thus is the process of change a continuing one.

Stages of Learning. Still another way of thinking about the steps or phases of change is to view change as learning. This was discussed in Chapter 3 as readiness. Change of any kind involves learning. New ideas, new values, new skills and ways of behaviour have to be learned if significant change takes place.

One of the basic findings about learning is that its rate is not uniform throughout. Although the rate pattern differs for different kinds of learning, generally it goes through several stages: slow start, acceleration, rapid rate, and levelling off. On a graph the line of learning speed appears as an S shaped curve. This is called the learning curve. This is shown in the figure below:
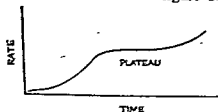
Learning takes place slowly during the early, experimental period. The learner is getting adjusted to the learning task. This is not a passive period; rather, it is a period of preparation. If the preparation is well done, if the individual is properly motivated and adequately guided to understand the learning task and what will be required of him, the next stage is one of acceleration and rapid learning. There is a sudden growth in the rate of learning. This period is followed by a decrease in rate. This may be due to many factors. When the greater part of the task is accomplished interest may fall off. The learner's attention may be distracted by other new challenges. A feeling of satisfaction may set in because much of the task is finished. Or, it may be felt by the learner that he needs a period to consolidate and organize what he has learned. It may be that the early stages of the learning task were relatively easy to accomplish but the later, more mature aspects require harder work and progress is slower. The learner may be experiencing some difficulty. Or, the needs of the learner may have shifted during the process, or the goal may be judged to be no longer fully appropriate or worth while. Whatever the reason, learning tends to level off and to enter a plateau period during which little that is new is learned.

The plateau period requires careful watching. If it occurs near the achievement of full learning or change, then there is little reason for concern—the learning task will probably be rounded out at a slower, normal rate. If, however, the plateau period arrives significantly short of expected achievement, special steps may be required to revive the rate of learning. The causes of the early plateau should be studied and appropriate action planned by the teacher. New motivation may be required. Assistance may be needed in digesting what has already been learned. The goal and the learning task may require adjustment in keeping with the new insights and purposes developed by the learner. The learner may need help in overcoming certain learning blocks that have developed. Improved communication may be required among learners working on the same task or between teachers and learners. When the situation has been accurately diagnosed and proper action taken, learning should move at an increased rate once more, towards fulfilment of the learning objectives.

Change often follows a path similar to the learning curve. After a slow start, change programmes often excite a great deal

of enthusiasm and rapid progress occurs. After a time, difficulties develop and interest lags. The blocks to change which appeared to be easily surmountable during the period of enthusiasm now loom large and cause discouragement. It is discovered that some of the earlier, rapid change was superficial and did not take root. Or, the administrators have lost interest and their attention is now taken up with other new programmes. This is a critical stage which must be carefully analyzed and special efforts made to move the programme beyond the plateau on to a higher level of achievement and to normal institutionalization. Many illustrations of this situation can be found in the attempts to introduce varieties of crops among Indian farmers. The following incident is one such story.

INCIDENT D

Two agricultural extension agents in the same region worked with the farmers of two different villages to popularize an improved kind of wheat. When the new wheat was introduced in the villages meetings were held to discuss the advantages of the new variety. A few farmers were taken to villages some distance away to show them fields of the growing grain and to encourage them to talk with farmers who had adopted the new wheat, and some of the grain was brought back for the wives to try in making *chapaties*. During this period some of the farmers were hesitant but it was agreed that they would go ahead with the experiment. During the first year the innovation produced considerable enthusiasm. Some of this may have been generated by the attention the extension agents gave the villages and by the cooperative spirit and community feeling produced by the project. When the new crop became green it looked healthier; as it matured it looked as if a higher yield would result. This expectancy was realized at harvest time and the farmers were very happy.

In the months that followed some rumours of dissatisfaction began to be heard. The wives complained that the new wheat did not grind into flour as easily as the old. The taste of the *chapaties* seemed different; some people liked the change of taste at first but generally there was dissatisfaction with it. A few farmers had more difficulty than usual with insects in the stored grain and there was discussion as to whether this was the fault of the grain or whether the unusual amount of rain and warm weather might be the cause. These and other real and imagined problems were discussed through the winter months. Some farmers were hesitant about planting the new variety again; others definitely decided to go back to the old variety and bought seed from farmers who had saved some of the old seed just in case the new did not prove to come up to the promises. Although the two communities did not exactly parallel

each other in the above-described developments, in the spring both extension agents had reason to be discouraged. It seemed to them that once more a good idea had reached a certain level of acceptance only to be thwarted by what seemed to be imagined problems.

One of the extension workers accepted the situation. He had seen many other village development projects come to a similar level of success and to progress no further. In fact, in too many cases even partial success was temporary and the village fell back to its old way of doing things. He was cynical and therefore did little to correct the situation which had developed.

The other extension agent was not so easily discouraged. He decided to investigate and find out the reasons for the villagers' hesitation to go all the way in adopting the new wheat. He found ways of adjusting the grinding wheels so that the new grain was as easy to convert into flour as the old. He helped the farmers who had had difficulty with insects to apply insecticides and eliminate the problem. He moved among the farmers reporting these and other solutions to practical problems and renewing their faith in the new variety. He arranged more visits to other villages where the new seed had been thoroughly adopted. He took them to agricultural research stations where they saw demonstration plots of a number of different new varieties of grain. Throughout these steps he stimulated informal discussion among the farmers, helping them to analyze the situation and to rethink what they should do. This additional effort by the extension agent helped the farmers to remove their fears and hesitations and to plan anew to go ahead with the experiment. In the spring following the winter of doubts more farmers decided to try the new grain, and the process of adoption once again resumed its upward path.

In this incident, one of the extension agents recognized the plateau period for what it was—a normal stage in the adoption process—and he took steps to analyze the causes and to take corrective measures.

The discussion above and Incident D bear out the generalization that: (3) *The process of change usually takes place in stages, each stage growing out of and building on the experience of earlier stages. Sometimes the steps are those of problem-solving. Sometimes they are those of an individual who becomes aware of a new practice and eventually adopts it. Sometimes they can be described as learning stages, including the plateau stage. However we view the steps or stages of change it is important to keep in mind that most people who are expected to make a change must experience all the stages themselves, personally. In this way it is possible for them to grow with the process, to change qualitatively rather than in form or appearance only. While there*

may be some people who require evolutionary development less than others, even those who are most change prone need help in adjusting to significant changes in attitudes and practices.

However, it is not always possible for everyone to go through all the stages involved in a change programme. This is particularly true where a programme is initiated at the national or state levels. In such programmes the early stages must be planned by groups at the top and passed down to lower levels for implementation. In such cases it is critically important that every effort be made to help persons at the level of implementation to experience anew some of the thinking that has gone into the earlier stages. This can be done in a number of ways. One way is for clients to be allowed and encouraged to replan the programme in terms of the local situation. Through rethinking and adapting the innovation the clients will develop some understanding of the earlier stages through which the change programme has evolved. As indicated earlier, such participation at the local level assumes that the plan developed at higher levels is considered in no sense a "master-plan", but rather, that procedures for replanning at lower levels be incorporated in the national or state plan. Another way to provide for growth of clients parallel with the earlier stages of a centrally initiated scheme is for them to carry on study and discussion of the problem area to which the programme will contribute. For instance, before introducing a new syllabus planned at the state level, it is desirable for teachers to be helped through study and discussion to understand some of the reasons why the syllabus is weak and should be changed. Or, before the introduction locally of a new scheme for the inspection of schools which was evolved in a national research project, it will be helpful for local inspectors to study some of their own problems in relation to the fundamental purposes of inspection. Such introductory experiences will not take the place of the full experience that has gone into the development of a new syllabus or a new scheme for inspection, but they will help the clients grow to the point of understanding the need for the innovation before they are expected to adopt it.

Still another way of building readiness by providing vicarious experience is to involve representatives of the clients in the original national or state-level planning, ask the representatives to return home periodically and explain the work of the planning

group, and issue periodic reports on the change programme as it develops. A good example of this procedure is provided by the social studies project carried out by the former Department of Curriculum, Methods and Textbooks of the National Institute of Education. In fact, this project has been developed largely through a series of seminars attended by representatives of teachers and training college personnel from all over the country. The stages of this project included (1) a statue study of social studies teaching in every state; (2) a rethinking of the concept and purposes of social studies teaching; (3) the development of a comprehensive statement of teaching social studies at the several school levels; (4) the construction of syllabi for the primary, middle and higher secondary stages; (5) the development of teacher guides for all three levels; (6) the writing of textbooks; (7) the planning of in-service training courses for teachers, administrators and inspectors; (8) the designing of an approach to individual states in which the resources developed by the project are made available through cooperative ventures between each state and the DCMT; (9) the planning of ways of evaluating the classroom experience with the new programme evolved for each state; and (10) actual work with each state or groups of states in adapting and introducing the new programme according to a carefully staged plan. Our purpose here is not to describe the social studies project in detail, but to indicate the number of steps involved in such a project *and* to point out that at each stage a number of appropriate persons from all over India are being involved who carry responsibility to inform others in their home territory of the progress made on the project. They are also asked to elicit reactions from the larger number of potential clients to the project as it develops from stage to stage. In such a scheme large numbers of teachers, teacher trainers, administrators and inspectors are encouraged to participate indirectly to a significant extent in the thinking that goes into the project and to become thereby prepared for adoption of the innovation in due time.

Adoption Rates Vary

In planning for the improvement of education we are interested in change in individual teachers and administrators. However, in most cases the individual educator works as a member of a group

—the staff of a school, the faculty of a college or the inspectors in
the district office. Furthermore, we know that for a change pro-
gramme to be effective it must have an impact on more than
one person on a staff; in fact, most innovations in education
bring about qualitative change in the instructional programme
only if they are seriously taken up by the staff as a group or
by a majority of the persons to whom the innovation applies.
Not only individuals change but also the group character is
altered. For this reason it is important to understand how
successful change tends to spread among the members of a
group. Our discussion of this process is based on the fact that:
(4) *Individuals differ in their tendency to initiate change, and in
their rate of acceptance of innovations.*

Systematic studies have been carried out by rural sociologists
of communities and groups of people among which successful
change has taken place. They have found that, in retrospect,
those people who eventually accepted a particular change tend to
fall into five categories: innovators, early adopters, early majority,
late majority, and laggards. Innovators are those who help to
initiate or adopt the innovation very readily. They are imbued
with a high degree of readiness and, on their own initiation or
at the suggestion of a change agent, an administrator or an
associate, they put the new idea or practice into operation.
"Innovators" make up the first 2.5%. These are followed by
"early majority", those who are highly motivated and who need
only an example or mild persuasion to step forward; they con-
stitute 13.5% of the total group. A third group, also "early
majority" represent the first part of the preponderant group who
come along after some time, and after they have been given some
help in understanding and preparing for the innovation. They
constitute 34%. The "late majority," the large number who are
slow to change but who do respond in time to the pressures of the
new conformity, represent another 34% of the total. Those last
to adopt the change are called "laggards," and they constitute
16%. Depending on the period of time over which the change in a
group is studied, this last group may include some who never accept
the innovation. The graph opposite shows that rate of acceptance
among a group tends to follow the normal distribution curve.

This analysis of people who accept change should help the
agent of change in planning his work. If he realises that people

INNOVATORS   LAGGARDS
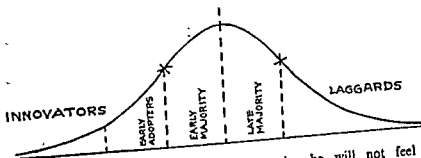
normally fall into these several categories he will not feel
frustrated when all members of a group do not respond with the
same speed. He will recognize this as the normal situation and
try, to capitalize on it. He may seek to identify the potential
innovators and work with them first, realizing that, once a
beginning has been made, the potential early adopters will join
the innovators, both providing the example, testing and tryout
which may be highly desirable before the innovation is adopted
by the majority. Every group will have laggards and usually it
is a waste of time to work with them during the early stages
because so much effort is required to get results. If the laggards
can be identified, may be the best the agent of change can do
is to take steps to neutralize their opposition.

A word needs to be said about innovators. Special studies have
been made of this group. As would be expected, they tend to be
the more adventuresome members of a group. Also, they are
usually less dependent on the respect of their immediate peers.
They look more to outside, impersonal sources for their ideas
rather than only to group standards. They tend to be young and
less conditioned by tradition. Because they tend to be non-
conformists they are sometimes viewed as deviants, as radicals
who have poor judgment and who are willing to flirt with new
ideas. In fact, these judgments are often true of innovators to a
significant degree and these characteristics often alienate them
from the majority of the group. If the agent of change recognizes
the potential contribution to group change which the innovator
can play he will do well to work towards an increase of com-
munication between the innovator and the total group and to build
respect and, possibly, acceptance for nonconformist behaviour.

Diffusion is often aided by the early adopters who share some
of the characteristics of the innovators but who tend to be more

accepted by the group. In fact, many of the early adopters are from among the opinion-leaders—those people to whom large segments of a group look for guidance and information as well as judgment on the worthwhileness of new ideas. Of course there are opinion-leaders who are not prone to change and hence are found among the late majority or the laggards, but where they are found among the early adopters they tend to encourage the majority to accept the example of the innovators. It would do the agent of change well to try to identify among the opinion leaders those individuals who appear to have early adoptor qualities and associate them with the innovators to help bring the latter into the purview of the total group. In fact, it may be wise to try to involve some of the conservative opinion leaders simply to neutralize their influence against recognition of non-conformist behaviour. This should not be done during the early stages, however, if the involvement of such persons will tend to disrupt experimentation, try-out and demonstration of new practices.

Even though comparable studies have not been carried out among teachers, the discussion above has its natural application to work for educational reform. While it is true that constructive change of depth in a school may not be possible without the contribution of a majority of the staff, it does not follow that administrators or change leaders should attempt to convert everyone at the same time. Effort may be wasted and resentments built up that will make for even slower adoption by those teachers who are less prone to change. In fact, a characteristic of the late majority group is that they take their example more from close associates and neighbours than they do from outside sources, change agents and administrators; hence they are more likely to accept new ideas after those ideas have been put into practice by someone close to them.

The intensive approach to school improvement promoted during recent years by the secondary extension programme is an example of application of what is known about rate of adoption among groups of people. In this approach the extension coordinator is encouraged to identify headmasters who are potential innovators and to work with them and their schools first. He may also select some headmasters who seem to fall in the early adopter or early majority categories to build lines of communication

between the innovators and those who are most likely to follow their lead. The coordinator also tries to identify those headmasters who are most respected among teachers and administrators as opinion leaders and whose involvement in new programmes will tend to give these programmes respectability. In his work with the group of headmasters selected for participation in the intensive programme the coordinator emphasizes the need to recognize that the teachers in each school tend to fall into the various categories —innovator, early adopter, early majority, late majority and laggard—and that each school improvement plan should reflect this fact. While it may be a mistake to work only with individual teachers, it is also a mistake to expect all teachers to be innovators or early adopters. A good school improvement plan provides opportunity for those who are ready to go ahead on certain experimental activities and it also provides group planning and evaluation procedures which broaden the base of involvement, even though it may be largely vicarious involvement for the late majority and laggards, so that those who will follow in adopting innovations have some part in them from the beginning. In addition, good communication is necessary among teachers within each school and among schools participating in the early adoption of new practices or programmes so that later diffusion is encouraged.

In Incident *A* the training college principal seemed to understand that rate of change naturally varies among his staff and so he did not insist that all members take up the new scheme for evaluation at the same time. He did, however, find ways of involving more than the innovators and early adopters in planning, and he used staff meetings to facilitate communication within his staff as to the innovation. He also asked one of the potential laggards, who was also an opinion leader among the conservative members, to be a member of the evaluation committee, and in this way he may have contributed to the eventual diffusion of the innovation to all of the staff.

In other words, not only does change take place in steps or stages within the personality and practices of individuals, it also diffuses by steps or stages within groups of persons. A word of caution is needed at this point. Both the speed and maturation of change within individuals and diffusion of innovations throughout a group differ from innovation to innovation. It is difficult to

predict how long it will take for a particular change to develop through the several stages or for diffusion to permeate a group. Some study of this aspect has been done which indicates that speed is conditioned by such factors as the complexity of the new practice, the amount of risk involved in accepting the innovation, the relationship between the innovation and deeply held traditional values, the degree of readiness for the change, the amount of skill to be learned to make use of the innovation, and the kind of promotion given to the new idea or practice. We have indicated in an earlier chapter that innovations which are substitutes for elements in the culture are more slowly accepted than are those which require only variation or addition to the present culture.

Another caution should be voiced over the tendency to dub a person as a chronic laggard or a predictable innovator in all situations. It is true that the behaviour of a person stems from his general personality and values and therefore an innovator will tend to behave consistently. The same may be said for a laggard. But to some extent a given person may be an innovator in respect to one situation or area of his life and a laggard in others. A political liberal may dress very conservatively, for instance. A person who eschews traditional religious beliefs may be very traditional in his food habits. A teacher may be an innovator in experimenting with new teaching techniques but very hesitant to question in any way the traditional authority of the headmaster. Or, an inspector may be very ready to promote modern ideas about school administration and very conservative on the language question. Human beings are complex and unpredictable. To foretell an individual's response to a new idea requires knowing him very well, and even then you may err. While it is wise for promoters of change programmes to keep in mind the ways in which persons tend to differ in their readiness and speed of adopting new things, it is unwise not to remain open-minded as to the likely reaction of each individual.

Another caution stems from the fact that the studies of categories of adopters have resulted from the analysis of fairly large groups—whole communities or the staffs of large organizations. The staff of a given school or the inspectors of a school district may be too small a group to contain representatives of all the categories. In respect to a given innovation the staff of a school

may, for instance, have no innovators or early adopters. Such a school may have difficulty in carrying out improvement programmes—among schools such a school may fall in the late majority or laggard category. On the other hand, a school may have few or no laggards because the headmaster has been selective in choosing teachers over a period of years. Such a school may rank high among schools and be a leader school. Because of the small size of the group or because factors have operated to give the group an unnatural composition, there is danger in generalizing too readily about the overall make-up of a group. It is also true that studies of adopter groups have not been carried out extensively among teachers in India so that we do not know how they compare with the population in general or with other professional or vocational groups. There may be factors at work which cause the more conservative people to become teachers and hence teaching groups would tend to have fewer innovators and early adopters than some other groups. Or the reverse may be true.

Effective Design of Change Programmes
The preceding generalizations about the dynamics of change lead to the conclusion that the effective design of change programmes is no easy, short-range task. In fact: (5) *The initial acceptance, and the maturation, diffusion and full integration of an innovation into a culture requires exposure to change programmes of critical concentration, sequence and continuity.* Let us deal with each of these elements separately.

Concentration. Whether we are concerned about a school staff, the schools of a district, all the teachers of a particular subject in a state, or the educational system of the nation, change is not likely to become truly institutionalized in a way that brings lasting qualitative improvement of depth and meaning unless the change programme is carried out with ample concentration. Concentration can be effected through participation by numbers of teachers. The involvement of one or two teachers from a large school will not make much of an impact on the total school programme. Initiating improvement programmes in a scattering of schools throughout a state is not likely by itself to bring qualitative alteration in the school system as a whole. Concentration can also be effected by frequency of contact, or by influence. A change programme that touches the clients once a year is not likely to

be effective. Desirable frequency of contact will vary in terms of kind of contact, the nature of the change programme and other factors, but it should be adequate to command the attention of the clients and the administrators of their schools, to elicit serious work and to produce results.

Careful thought about the desirable amount of concentration in a programme leads quickly to the conclusion that a workshop or training course once a year for teachers of English, for instance, is not likely to produce results unless the total programme includes several other kinds of contacts and influences. Perhaps lack of follow-up is the major weakness of extension programmes for teachers because without it there is inadequate focused attention to overcome all the forces working against change.

Sequence. Not only is contact of some frequency required, that contact must be carefully planned so that each activity follows logically on what was accomplished in previous activities. For instance, in a first session with a group of headmasters general discussion may be held on the problem of more effectively working with teachers for school improvement. In a second contact there may be individual discussions with headmasters during which the headmaster is asked to indicate his reaction to the previous discussion and to suggest how points made relate to his own situation. In a third contact work might be focused on the planning of specific experiments or trials of new ways of working. In a fourth, some of the problems that have come up in the initial trials may be solved. Such a sequence of activities would continue until the goals of the programme were reasonably well accomplished. This might be a matter of years; in fact the process might never cease but would shift to new problem areas as success was achieved on each one. Such cooperative efforts among the headmasters of schools often lead to the establishment of headmasters associations which carry on continuing programmes to upgrade school administration. Sequence may be another way of describing the stages of change.

Continuity. Continuity is involved both in concentration and sequence. The key factor is that there must be *continuity among the clients* as well as in the change programme. Looked at from the standpoint of the extension centre, many extension programmes have appeared to have concentration and sequence. However, closer analysis has revealed that in too many cases

the persons participating in the activities of the programme have changed so frequently and to such an extent that there was little continuity among the clients. If such is the case little accumulative effect is possible and much of the effort of extension programmes has gone "down the drain" for this reason.

The essential difference here may be characterized by the terms "activity" and "programme", two terms that are often used interchangeably and confused with each other. Activity may best be defined through examples: a workshop, a school visit, a seminar, or publishing a pamphlet. A programme is made up of many kinds of activities organized in such a way that their effect is accumulative for the participants: a programme has concentration, sequence and continuity. One workshop is not a programme in this sense, but it may be part of continuing series of activities which are planned to add up to a particular result. For reasons of strategy it may be very desirable to begin with a small group of innovators, and hence to seem to compromise the principle of concentration. This is not a weakness if the long-range programme is so planned that more persons than the small group of innovators are touched by it. The beginning activities may not contribute a concentration of influence but the total programme does, and that is the important thing in the long run.

It is not always easy to keep these ideas in mind in planning and carrying out a change programme, as the following incident will show.

INCIDENT E

At a meeting of extension workers a new coordinator reported on a successful activity. He had organized a training course for geography teachers to bring them up-to-date on developments within geography and on the teaching of geography. He had been successful in getting the assistance of two very able geography professors from the near-by university. School headmasters had cooperated in sending teachers; 19 headmasters sent one teacher each from their schools. Evaluation at the end of the course indicated that the teachers had learned a lot and they were enthusiastic about how what they had learned might be used to improve their teaching.

When the coordinator finished his report he was questioned by some of the experienced coordinators on what his next steps were. He responded that word of the success of the activity had got around and that he now planned another training course for teachers from another group of

schools. The headmasters of other schools wanted the activity extended to their teachers, and the inspectors and the training college principal felt it was *politic* to accede to the request *One of the conveners of the meeting* asked what was planned for the 19 teachers who attended the first training course. The coordinator responded that he had not planned any additional help for them; they had had their chance. At this point in the discussion several of the more experienced coordinators spoke up. They too had organized activities which were successful and they had repeated them because of popular demand. They found out, however, that little actual change had occurred in teaching as a result. They testified that teachers made ambitious plans during the training course but few carried them out. In some cases the teacher made a start, ran into trouble, and *quit his plan. In other cases the teacher was discouraged by the attitude and criticism of other teachers who had not attended the training course. In still other cases the teacher was not provided with the materials he needed to implement his plan.*

Before the discussion was finished it was clear to all that the experienced coordinator's and the convener's advice to the new coordinator was:

1. Plan follow-up activities for the 19 teachers who had attended the first training course.
2. Plan training courses for additional geography teachers in the same schools before going on to additional schools.
3. Involve the principals of the schools in planning a programme of continuing activities and support for the innovations planned by the teachers.
4. Seek the understanding and support of inspectors and the training college principal in resisting pressure from headmasters to spread efforts thinly so as to reach all schools quickly.

It is easy to organize individual workshops or training courses, and it is rewarding to do so if able resource persons are available who can command the attention of participants. It is difficult to make sure the activity results in actual improvement in the classroom. It is easy to start science clubs which offer teachers and students a chance to break away from the hum-drum of routine classwork. It is difficult to bring about science clubs which are self-generating and which contribute qualitatively to students understanding of the nature of science. It is easy to organize a committee to bring out a publication. It is difficult to organize and carry out a continuing programme which assures that the publication will contribute to growth and improved performance on the part of teachers. In retrospect, it appears that much of the effort that has been expended for educational improvement has been used in starting a large number of discreet activities, few of them related to each other and few of them persuing a problem

area to its roots. Success of extension workers has been more often judged in terms of the number of new activities started during each reporting period than in terms of the degree to which there has been continuity and follow-up of previously organized activities. Quantitative performance has been given more attention than qualitative change. As a result there has been much activity but little of it has offered much promise of results because there has been too little concentration, sequence and continuity to bring about actual results.

It has been said that Indians are long on planning and short on implementation. This may be a misleading statement. It may be fairer to say that Indians are short on implementation because they are short on planning. Plans are often highly theoretical. They are often unrealistic. And, above all, they often overlook many of the factors that should be taken into account to achieve expected results and to deal with these factors in a proper order, with adequate concentration of forces, and over a sufficient timespan for participants to come to understand, assimilate and master the new ideas, attitudes and skills required for qualitative change.

Change Requires and Begets Change. The reader will recall Incident *B* presented near the beginning of this chapter. In this story the clerks might have accepted the introduction of the pool system if other changes had been introduced at the same time to eliminate the threat to free time, status and close association with individual inspectors. For instance, a new schedule of additional time for tea breaks might have been introduced. The clerks might have been brought into the planning of the office work so that they felt they were being given higher responsibility and closer contact with the inspectors as a group. Each inspector might have been asked to take responsibility for showing an increased interest in the problems and interests of one or more clerks. It is not our purpose here to solve all the problems posed by Incident *B* but rather to illustrate that the success of an innovation often depends on other changes. If other appropriate changes are made the innovation may be accepted; if they are not made the innovation may create so many new problems that it will not be accepted.

One of the factors often overlooked in educational planning stems from the functional *structure of a culture* and each of its sub-units. We have talked about culture in Chapter 2. In review, a culture is an operating system of intricate interrelationships.

It has order, functional harmony and mechanisms through which perpetuation as well as change occur. It has a value system which tends to give quality and consistency to decisions made by individuals and groups. It adds up to an integrated unity. Each part of the whole has a role to play and other parts depend on how that role is played. These general characteristics are not only true of the culture as a whole but also of each of the sub-units of a sub-culture such as the political system or the educational system.

Because of the unitary, functionally integrated nature of culture:

(6) *Innovation in any one element of a culture tends to create disharmony and to stimulate interactions between the altered element and its setting, necessitating mutual accommodations.*

Accommodation and adjustment. Many illustrations can be given of the disharmonies created by innovation and the accomodations and adjustments needed for successful adoption of the new practice or idea. Incident *B* cited above is one such illustration. In Incident *D*, also, the aggressive extension worker recognized the disharmonies created by introduction among village farmers of a new variety of grain and he took steps to help the farmers adjust the grinding of the grain into flour and to solve the problem of insects in the stored grain. In this case the innovation caused vexing problems which were solved through the adjustment of practices related to the innovation. In other cases it may be necessary to alter related cultural elements so that they support the innovation. The introduction in a tribal area of a government-sponsored school, cited in Chapter 2, is a good example. In this case accommodation is required with the work responsibilities of tribal children and with the tribal educational customs. Adjustment is also required in the attitude of tribal leaders towards government interference. Unless these and other changes are made to support the new school it is destined for rejection or artificial existence.

The present educational system of India is a good example of an institution which is part of the overall culture and also exists as a culture in and of itself to a considerable extent. It has a significant degree of order, unity and integrity. It rests on a set of values which have come to justify and explain the nature of the programme. Although it is criticized by many it continues to perform its functions quite impervious to the criticism because

it has a place in the total culture and it operates reasonably smoothly. Because it is an accepted, tight-knit institution, change in any one part requires adjustments in other parts for the success of the innovation. The introduction of well-equipped laboratories for the teaching of science is a good example. Recently much stress has been put on the importance of laboratory experience in teaching students the role of discovery in science, among other desirable goals. Reasons for laboratory work have been theoretically accepted by science teachers for many decades, yet actual use of laboratory equipment to any significant extent will not come until a number of adjustments and accommodations are made in other elements of the educational system. To begin with, the system of responsibility and accountability for the apparatus needs reform so that the teacher does not feel he is protected only if the apparatus is kept locked up and not used. Secondly, the examination system must be changed so that students, teachers and parents place value on what can be taught through proper use of the laboratory. And thirdly, administrators and inspectors must come to appreciate new purposes for teaching science so that they lend their support to the teacher who tries to make intelligent use of laboratory experiments in teaching. These are only some of the related changes that are required.

To cite another example, there is much discussion of the policing, overly-critical and threatening nature of school inspection. It is felt by many that the inspector should become more of a supervisor, more sympathetic in his approach, more positively helpful and suggesting, and less authoritative and punitive. Correct as this change of roles may be, it cannot successfully be brought about without concomitant changes in the role of the headmaster, in the sincerity of commitment to teaching by teachers, in the staffing pattern of the inspectorate, and in the concept of good teaching held among the public politicians, school administrators and the teachers themselves. Any plan to introduce significant reform in the inspection process is bound to be only partially *successful* unless the plan includes concomitant, coordinated attacks on the several fronts of the problem. Inspection as it now operates is a key part of the system. Change it and you upset the system so that it will not function without considerable confusion *unless* supporting adjustments are also made in the related elements of the educational system.

At the same time when we look at the educational culture we must take into account the larger culture of India. Change in the fundamentally authoritarian nature of inspection cannot proceed far until authoritarianism in Indian culture as a whole begins to lose its strength, and experience with more *democratic* methods tend to build reliance on democratic values. School inspection is an integral part of the educational culture and also of the culture in general. This is why so much effort is wasted in carrying out ad hoc, uncoordinated attempts to change school inspection without the leadership and support of sympathetic changes in all of government administration. The school inspector is not going to take reform projects very seriously when other government administrators at his level ridicule reform ideas and give no support to them.

Still another example of the need for accommodating adjustments is in the introduction of higher secondary schools. Among other things, this innovation was intended to shift responsibility for the intermediate preparation of students for university study from the control of the university to the secondary school, and to encourage secondary schools to provide for students appropriate programmes other than those required for university admission. However, no provision was made to provide teachers in the secondary schools able to give the same kind and level of academic instruction formerly provided in the intermediate colleges; nor was any change brought about in the standards expected of the higher secondary schools. In other words, the higher secondary schools were given neither the kind of teachers required to meet the old standards nor were the standards themselves adjusted to what the higher secondary schools could do. As a result the higher secondary programme was judged by many to have failed.

Interactions and New Configurations. Sometimes the introduction of a new or changed practice into the system stimulates reactions and combinations which produce new and often troublesome configurations among cultural elements. Let us use the analogy of chemistry to make more clear what we mean. When a chemist adds one pure chemical to another he can predict the results because he knows only two chemicals are involved, and he knows the properties of each and how they will react on each other. If, however, he adds a pure chemical to an impure chemical he is likely to get results which differ from what he expects either

in intensity or in kind, or both. This is true because the added chemical and one or more of the impurities may produce a number of secondary chemical reactions other than the primary one expected, and these secondary reactions may in turn speed up, slow down or contaminate the expected primary reactions. The results could even be explosive; or nothing might happen.

A similar situation faces us in adding a new element to a culture. We may have in mind that the new element will react in a particular way with a part of the setting into which it is placed and that a particular, desirable result will be accomplished. However, what actually happens is usually something much more complex. The new element often reacts or combines with elements other than those intended, or it stimulates other elements to behave in unpredicted ways which block or corrupt the intended result. Sometimes a chain of unanticipated reactions and interactions are set in motion. If not properly guided or controlled, they will upset expected response to the innovation and will lead to evils possibly greater than the one the innovation was intended to correct.

Internal assessment in schools serves as a good example. It was introduced in some states for the purpose of improving the relationship between testing and teaching. It was thought that if the individual school had responsibility for determining a part of the total number of points required of students for passing, then the school could hold more frequent examinations and encourage students to study throughout the year, not just toward the end of the year in preparation for the external examination. Also, teachers and students could find out periodically what was being learned and what was not, and teaching could be adjusted accordingly. However, when the individual school was given control over a portion of the students' marks there came a shift in the tactics of the powerful cultural force of parents' desire for high pass marks for their children. The focus of part of this very strong social force shifted to the principal and the teachers. The force had been there all along, causing the school to teach primarily to satisfy the external examination, but now the school could be held directly responsible for a portion of the examination results. Some of the principals and teachers could not stand up to the additional pressure and corruption set in. Teachers helped their students on examinations, particularly those who were sons and daughters of

powerful political personalities, and principals altered the marks that were sent in to the boards of secondary education. In some cases, schools reported the full number of marks for all their students sitting for the external examination. Since the reputation of a school rests almost entirely on the number of students who qualify for admission to the university, and this is almost wholly a matter of examination results, the schools felt that they were serving their students best through this use of their additional responsibility.

Needless to say, this was not the intended reaction to the introduction of internal assessment in secondary schools. Internal assessment can be successfully handled only through anticipation of these kinds of unplanned reactions to its introduction. Such anticipation might lead to the concomitant introduction of measures to help the teachers and principals stand up to the pressure brought to bear on them, among other things. One such device has been successfully used for many years in one of the training colleges in a large centre of government; it is illustrated by the following incident:

INCIDENT F

The peon appeared at the principal's door and announced that a well-known, powerful politician was on the telephone. The principal expected calls from such persons and he was ready for them. The examination results had been announced only a few days previously. After the faculty had taken into account the several sources of data on student performance, including internal assessment, practice teaching, participation in co-curricular activities, etc., the marks had been turned in to the principal who met with a special committee to make final decisions. Several students had failed to come up to the standards set by the college and the politician was calling on behalf of one of these students. He pointed out to the principal that the student was the daughter of a wealthy and successful businessman from a prominent family. There must be some mistake; *surely the girl should not fail, he said. He, the politician, would find it* difficult to explain to the father that nothing could be done to change the decision. Surely the principal could take care of the problem. The politician was deferential in his tone, but also commanding; he expected action. The principal responded that he could understand the father's and the politician's concern, but the student's work had been very carefully gone over and she definitely had not come up to the mark. The politician became more commanding and insisted that the principal make the necessary changes in the record. The principal immediately pointed out that the decision was out of his hands. Unlike many other college situa-

tions, the principal did not now make such decisions himself. The special committee had made the decision; on the committee the university and the managing committee were represented as well as the college faculty. The principal could not alter their decision nor could he ask the committee to reconsider its decision unless new evidence was produced. The politician was presenting no such evidence. The politician became abusive and the principal politely ended the conversation, referring the politician to the vice-chancellor if he wanted to carry the matter further.

This training college principal was able to maintain the integrity of the internal assessment system because of the device of the special committee. He also had a clear understanding of such matters with the vice-chancellor of the university. This is only one example of the ways in which the innovation of internal assessment can be supported by adjustments in administrative procedure. Many colleges do not use such a special committee; it was not always true in this college, and it is not uncommon for marks to be changed in colleges where the principal is not protected from outside pressure.

Adjustments in Innovations. Sometimes the need for adjustments in the receiving culture are increased by unnecessary inflexibility in the innovation. Where this is true the problems are more difficult to handle than they need to be. For instance, when the state government introduces primary schools in tribal areas it is not necessary to adhere strictly to the usual formula for a primary school. The schedule can be altered to accommodate the work responsibilities of tribal children. The curriculum can be changed to include some of the content usually taught through tribal educational procedures. In these and other ways the adjustments can be eased. To take another example, the size of classes prevailing in many secondary schools makes it very difficult to have a full programme of laboratory work in science for individual students. For many reasons it is very difficult to adjust the size of classes. An alternative is to adjust the use of laboratory experience through the use of demonstrations by the teacher with the help of a few students, with frequent rotation of students to broaden participation. Such an adjustment makes it far easier to introduce laboratory work in many schools; without such an accommodation that attempt to provide laboratory experience is not likely to be successful where class size must continue to be large.

The agent of change should not be defeated by the fact that

most innovations he would like to introduce are likely to require and/or cause adjustments in the cultural environment into which they are introduced, or in the innovation itself, or both. This fact does not make the task an impossible one, but it does give some guidance as to the seriousness with which any task of social reform must be taken up. The process is complicated, fraught with the possibility of unexpected ramifications, and demanding of continued attention.

Group Factors Influence Change

A teacher is reluctant to take part in teacher meetings in the evening because it interferes with her commitments to her family. A headmaster is uncooperative with an extension worker because he belongs to an educational society which does not approve of the programme the extension worker is promoting. Another teacher is motivated to volunteer for an experiment in teaching because he knows other teachers in the clique to which he belongs favour the experiment. A headmaster finds his staff is more enthusiastic about school improvement projects when they help to plan and evaluate them. A teacher finds she can motivate students through the use of competitive groups within her classes. An inspector does not respond to a suggestion which is not in keeping with his concept of the role of inspectors as a group. Several teachers in a school hesitate to commit themselves on a proposal until they know the opinion of the senior teacher whose lead they normally follow. A project moves ahead quickly when it is taken up by a group of schools which usually work together and among which there has evolved a system of leadership and cooperation. These are some of the instances that can still be cited to illustrate that: (7) *The forces of formal and informal group dynamics are powerful influences for or against change.*

To understand the importance of group dynamics in supporting or opposing change, we must first make clear what we mean by a group. There are many kinds of groups. Several persons gather on a street corner waiting for the light to change before crossing. In one sense these persons form a group—they have a common purpose, for the moment. Or, we might speak of all persons between the ages of twenty and thirty who have red hair as a group. In neither case do these people make up a group in the sense that we are using it here. By group we mean people who

are tied together by common purposes, continuing interaction and group loyalty. The members identify with each other; each person sees his interest as being tied up with that of the group as a whole. Each person feels obligations to the group of which he is a member and he expects certain kinds of assistance from the group as a unit, and from individual members. Within the workings of a group each person plays one or more roles. He may be a leader, he may be a follower; or he may be a secondary leader who commands the followership of the group in some circumstances but who looks to the top leader for orders. He may be the group humorist, or the group cynic. He may be the solid citizen who is known for his sober and thoughtful answers to problems. These and many other rôles are played by the members of a group.

Within this description there is scope for many kinds of groups. A family is a group. Workers building a road constitute a group, at least while they are working together on a particular road. A private society organized for professional purposes is a group. A village is an organized, functional group. A committee formed to do a particular task is a group for the duration of their task. A working group formed as part of a workshop of teachers is a group if the members come to have common purposes, if the various rôles of group membership are assumed by different members, and if there is interaction that contributes to and draws on group feeling. The staff of a school or college is a group, or can be built into one with proper leadership. Informal groups are often formed within the staff of an institution, each such group revolving around common interests within or outside the institution, or around individuals with strong personalities. It may be that in some schools very little group feeling and very ineffective group interaction is developed; where this is true the staff is more of an incidental collection of people than a group.

Many books have been written about group dynamics. It is not our purpose to duplicate those books here; only to call attention to some of the ways group dynamics influence change. We have already touched on this influence in this chapter and in previous chapters. We have indicated how readiness to change is influenced by a person's social relationships including his group memberships. We have also referred to the rôle of opinion leadership which is a group rôle. We have talked about the rôle of traditional groups and institutions in preserving order during

change and providing a vehicle for change.

Groups often become protective of the interests and purposes of their members; for this reason they are often viewed as the enemy of change. New ideas often seem to threaten the interests of the group, or of the leaders of the group who see change as a challenge to their authority and power. Fear of losing the benefits and psychological security provided by traditional group arrangements often stands in the way of open-minded consideration of innovations. Students of Indian society are certainly aware of the many ways in which traditional group loyalties serve to perpetuate tradition and to discourage change. The strong family group tends to be a conservative social unit. Communal groups serve to protect group interests and to encourage continuation of customs more than to encourage innovation. Various kinds of professional societies, political and business organizations are often more interested in preserving known advantages than in exerting influence for experimentation and change. Sometimes *competition within groups for positions of power and advantage distract attention from questions of group purpose and the organization ceases to serve even its protective purposes.*

There is another side to the story, however. Groups have a structure and system for taking action. Their leaders are potential means for reaching larger numbers of people. Their internal dynamics provide for interaction, communication and discussion of new ideas. Leaders of such groups are often nearer to the needs and wishes of their members than are the appointed officials of government. For these and other reasons organized groups can be of considerable assistance in the promotion and diffusion of innovations. In fact, some organized groups have taken initiative in bringing about social change and development in India. For instance, religious groups such as Christian missionary organizations, Muslim organizations and Hindu reform groups have taken responsibility for starting and running schools and for establishing social welfare programmes. In some instances, the Arya Samaj for example, such organizations have worked actively for social and religious reform. In many cases where these organizations have operated schools they have attempted with some success to *provide educational programmes of high quality.*

There are instances where organized groups have been used

initiative or have been used by change agents to promote developmental change, actually very few organizations or group efforts are organized voluntarily for the purpose of promoting change. This is certainly true in education where there are very few teacher organizations, and those that do exist do not carry out effective activities, for the most part. The spirit of cooperation seems weak; seldom does an agency show interest in cooperating with another on potentially mutual concerns. Persons asked to work together on a project are hesitant about how to go about the task—they wait for a person of authority to tell them. In meetings of school headmasters and principals the participants are often unable and unwilling to evaluate their own work, to reflect critically on each other's reports; they insist on being told by the convenor or the outside consultant that their work is good or defective. Sub-committees or working groups of teachers in workshops usually grope around for some time, unable to organize an approach to the topic or problem at hand until one of the leaders of the workshop comes around to help them get started. In such ad hoc groups the tendency is automatically to ask the senior or ranking person to be chairman, whether or not that person has demonstrated any particular interest in the topic or has the qualifications required to be chairman. The furniture for meetings is usually arranged with a special table on a platform for the leaders and persons of authority, with participants' chairs arranged neatly in rows facing the platform as in most classrooms. Individual participants find it difficult to engage in informal discussion; usually they stand, face the chairman, introduce themselves, give their credentials, and launch on a speech. Even when short contributions are made they are usually made to the chairman rather than to the group.

Quite often, when a degree of informality has been established, several persons talk at the same time. It is not uncommon for three or four persons to dominate discussion for fifteen minutes, each commanding attention in turn for a few minutes at a time, and each advancing an argument unrelated to that of the others, none listening to what the others are saying and in no way reacting to what has been said by the others. And always, regardless of the kind of group activity going on or the depth of involvement of participants, if a person of prestige or authority approaches or joins the group, all discussion ceases, everyone

jumps up to make room or provide a chair for the newcomer, and the progression of thought is interrupted.

These are evidences of too little understanding of group dynamics, of too little faith in the ability of groups to do productive work, and an inadequate sense of the ways in which small groups can be useful in seminars, workshops and conferences. Therefore, few traditions for using group and discussion techniques have been built up. Even in such organizations as those carrying out extension and in-service programmes for teachers there is the constant tendency to fall back on lectures as the chief means of communicating and developing ideas.

One of the reasons why understanding of the power of group dynamics is slow to develop is undoubtedly the strong authoritarian tradition that permeates Indian culture. Another may be that the benefits of democratic participation are misunderstood and misrepresented. Enthusiasts for theoretical democracy have been heard to say that "the process of democratic discussion and group decisions will always produce the correct answer." With this lofty expectation from democracy it is no wonder that there has been great disappointment with democratic methods. The justification for democracy is not that it always produces the right answer; right answers may more often be provided by an informed autocrat. The justification lies more in the area of motivation, cooperation, evaluation and corrective action, and human growth. Where group activity is used to plan a project, motivation is developed to see it through. Where group exchange and discussion of ideas contributes to the planning of a programme, there is developed the kind of understanding needed to put the programme into use. Where there has been group involvement in planning, a basis for cooperative effort is built for implementing the plan. Where the group plays a part in planning and evaluating, an automatic corrective device is built into the project. Where dynamic group interaction is present throughout a project, human growth and change take place in accord with the goals of the project.

It is not just a question of initiating group dynamics; in a sense they already exist. Any government official will tell you that one of his major problems is controlling or defeating the "politics" that goes on among his staff in opposition to his leadership or official regulations, or to gain advantage for cliques

or individual members. Rather, it is a question of bringing group dynamic forces into the open and into positive support of programmes. Until the positive potential of group activity is recognized much human effort will be lost through the continuation of authoritarian leadership and through group activity carried on largely for protective purposes or to subvert official policy and change programmes.

This generalization about change has implications for the organization of workshops, training courses, conferences and other meetings. It also has implications for the kind and amount of encouragement that is given by government to the organization of voluntary associations of teachers, headmasters and teacher educators. It has particular implications for the way in which the head of an educational institution works with his staff. The administrator who operates his school or college largely through the issuance of "notices" is not going to marshall the positive contribution that can come from group efforts. On the other hand, the head who attempts to build his staff into an integrated unit, and to encourage and make use of the dynamic interaction among the members in support of school improvement programmes may find that his task is less that of controlling and punishing teacher initiative and more that of guiding and cooperating with group energies. He may seek to identify the natural leaders in his staff —the opinion leaders—and make use of their ideas. He may recognize the natural interaction and lines of communication that evolve among his staff and make use of these means of discussing and testing ideas. He may listen more than dictate. He may use these and similar techniques to recognize and encourage the potentially cooperative spirit that makes a collection of teachers into a functional group. Once this is accomplished he and the staff can work together with a single purpose and a coordinated direction that should produce significant results.

Frustration Encourages Escape Mechanisms

A leading educationist in one of the states recently reflected along these lines:

> We Indians have been ruled by outsiders during so much of our history that we have developed an unusual ability to evade government domination of our lives. We have a great skill

at pretending to go along with official orders and regulations while continuing to carry on our lives as we see fit. We have learned to escape pressure for unwanted change by adopting symbols of change while continuing to live in our unchanged way. This ability has served us well in the past. However, now that we are governing ourselves we continue to behave in the same way in response to the programmes of our own government. Avoidance of government officials and regulations has become so ingrained in our culture that we continue to evade our own democratically elected officials and programmes decided by them.

There may be considerable truth in this statement. It helps to explain the last generalization to be presented in this chapter, namely, that: (8) *Frustration resulting from unsuccessful attempts to promote or to assimilate change often leads to the adoption of false symbols of change as protective devices.* Let us see what this means in terms of examples. When a school inspector visits a school he is often entertained by a prepared programme intended to impress him and to cover up the real situation in the school. The students and the teachers are carefully rehearsed to put on a "show" for the inspector. This is a form of pretence; the headmaster, the teachers and the students know that the purpose is to mislead the inspector, and they all do their best to put on a good performance. The inspector also knows the purpose. He knows that the school has not satisfied all the regulations nor fully followed the suggestions made on his last visit. He also knows that many of the student papers and handicrafts placed on exhibit for his inspection were either prepared by the teachers or have been collected over a period of many years; that they are not characteristic of the quality of work currently being done by students. He probably knows that it is impossible for the school to come up to the pretended standard without putting out more effort than can easily be stimulated or using more resources than are available. The "show" gives him an escape from his responsibilities also—the responsibility of trying to force the school to do what it will not or cannot do. The school puts forward certain false symbols of a high quality of work; the inspector accepts these symbols, and everyone has happily avoided the difficult task of providing really effective education.

Something similar happens when development agencies are unsuccessful in promoting change. An institute, bureau or council is organized to find solutions to the very difficult problems of improving some aspect of education. After a time the organization finds it can make no substantial progress. Quite naturally it turns its attention to activities which take the place of progress— it calls conferences frequently and issues fancy reports. It asks government officials to give lectures and surrounds the occasion with much pomp and ceremony. It sponsors competitions and gives awards which give the impression of great activity, or progress and of public acceptance. They are symbols of progress rather than the real thing. They provide a certain satisfaction, and since the ability to evade what is expected is so deeply encultured, the staff of the organization sometimes fool even themselves. Activity for activity's sake comes to be accepted as the justification for the existence of the organization.

These kinds of escapes are tragic enough when they are used to cover up inability to solve serious problems and to make real progress. They are even more tragic when they are used to cover up poor planning and ineffective methods of work. Quite a number of extension centres have resorted to the use of frequent and attractive publications as symbols of effective work when actually their programme was weak due to an almost total lack of planning in the long-range sense. Private schools make claims in their school brochures of major contributions to the development of *moral and citizenship qualities* when in actuality they often completely ignore these aspects of good education. Another form of escape resorted to by many educational workers is research. An individual who does not know how to go about planning effectively to carry forward his responsibility finds refuge in research. His research may not be very promising of results either but it has the appearance of serious and important work. Also, committees and commissions are frequently appointed to investigate a problem that might better be attacked through effectively executed programmes which can be launched without additional investigation. Earlier we have called attention to the tendency to draw up ideal, unrealistic plans which everyone knows cannot be implemented; such plans serve as symbols of progress which take the place of careful planning and hard work for actual progress.

A psychologist would be quick to point out that escape mechanisms are not uncommon among human beings; in fact, they are necessary for most persons. They may serve a particularly useful purpose in India today where most problems are highly complex and highly resistant to solution. However, such escape from action can become habituated way beyond the normal psychological need, and avoidance of responsibility carried to unjustified extremes. Careful planning of change programmes within realistic expectations, with systematic follow-up and periodic evaluation, will go a long way to make pretences and false symbols of progress unnecessary. Furthermore, where avoidance tendencies do develop, the best solution may be for leaders to bring them out into the open, to encourage group members to talk about them, and through coming to understand the reason for such tendencies, learn how to deal with them.

Perhaps the greatest difficulty faced by an agent or administrator of change programmes is that of drawing people out, getting them to respond frankly, getting them to say what is on their minds, getting them to admit weaknesses and to discuss their problems. One frequently talks to persons who appear to have no ideas, who seemingly have not thought about their work in a critical or creative way. Also, one frequently meets people who are the opposite—who try to give the appearance of knowing everything, who pretend to be completely in command of their situation, and who appear to have solved all their problems. Both kinds of people may be exercising a defense mechanism built up over many years through the desire to conceal from authority what their real situation is. Both are a challenge to the leader who attempts to stimulate productive dynamics among the workers at a particular level and also between workers and their superiors.

IMPLICATIONS

Introduction

Perhaps the most critical need of development projects in India is to find ways of releasing human potential throughout society and guiding that potential along constructive lines. This problem is critical because few problems lend themselves to solution without the full cooperation and contribution of everyone touched

by the problem. The situation is complicated by the fact that too few leaders and administrators recognize this problem in all its dimensions. They have some knowledge of the many ways in which people successfully oppose new programmes and circumvent regulations. They would like to see the opposition and evasion lessened, and their efforts to do this are usually made up of more programmes and more regulations, and more enforcement. It does not occur to enough of them that human effort can be released to serve the purposes of development programmes, not just oppose them. Nor do they understand that without the active support of natural social forces few organized efforts to reform society can be successful.

In a general sense the theme of this book is that successful change programmes must start with the client, they must be carried out by and with the client, and they achieve their purposes only in so far as the client voluntarily makes the results a part of his life. Successful change seldom results when administrators force new programmes on people at lower levels; it takes place when clients *willingly experience growth themselves,* with the motivation, leadership and assistance that administrators and agents of change can provide. It cannot be planned, packaged and sent out by central planners for implementation at local levels.

Fortunately, the importance of change dynamics is gradually being realized. In such areas as community development, small industry development and family planning more attention is being given to the relationship between social forces and change. In education, factors of change dynamics have come into discussion among development planners, into training programmes for extension workers, and into the planning and operations of school improvement programmes at local levels. The implications of this discussion have not yet penetrated very deeply, however, nor has much attention been given to research in this area. Of particular significance is the fact that the administration of educational institutions has not yet been touched to any extent by this new thinking.

One promising research project seriously discussed in the National Institute of Education was concerned with the development of case studies of selected extension centres, some successful and some less successful. The focus of these studies would be to

identify and describe in detail the dynamic factors in the educational communities served by the centres, the new forces introduced by the extension programmes, and the resulting interactions and outcomes. *The intent was to try to identify those patterns of forces and interactions which seem to produce desired results, and those which seem to work in opposition to the goals of the programme.* Undoubtedly one of the areas of learning from this study could be the degree to which existing social factors in the communities determine the results of extension activities—factors which have little to do with the utility of the new ideas or the way they were introduced by extension workers. If this is found to be true it will suggest that the extension worker needs to know very intimately the community in which he works—how it functions and how it is likely to react to new ideas—if he is to be successful in planning and carrying out his programmes. Other lines of research into change dynamics are needed.

Recommendations

The recommendations below will summarize and complement the discussion above:

Provide for Feed-back, Evaluation and Redirection

1. At national, state and regional levels, all planning of programmes should allow for participant evaluation and feed-back from the implementation of the programme. It should be recognized from the initiation of each project that local evaluation and feed-back are likely to indicate the need for adjustment in the means, the direction, and even the long-range goals. Unusual attention should be given to finding ways of breaking down the blocks to communications that normally exist between persons of lower status and higher authorities, so that the results of evaluation and experience are communicated upwards. This will require the best that is known about human relations in administration. It will require attitudes and procedures not normally found among bureaucratic administrators. (More on this in the next chapter.)

2. Provision should be made for wide participation in planning at the level of implementation. Major programmes may be planned at national and state levels, but planning at these levels should be flexible and general, allowing, yet needing, further

planning and replanning at local levels *in terms of the conditions and understandings of the people who will put the programme into operation.* Every effort should be made by national, state and local leaders to build understanding of the objectives and long-range goals of the programme as conceived by the original planners, but success in the end rests on the conception local leaders and clients have of programme purposes and how they relate to their needs.

3. Particular attention should be paid to creative involvement of key leaders at state and local levels, whether they be community leaders, heads of private organizations, respected officials, or opinion leaders within the staff of individual institutions or other groups. Such involvement should be two-way; key leaders should be listened to because they are the source of respected ideas, and they should be asked to assist in introducing and spreading innovations. Failure to make use of opinion leaders means not only that a source of assistance is overlooked; it also means that a source of potential opposition probably has been converted into *active* opposition.

Use means Appropriate to Goals

4. In planning improvement programmes care should be exercised in the selection of means for implementing them. The means used should be consistent with the objectives and goals of the programme, and with development goals in general. Central planners who work out every detail of development projects often overlook the means for implementing them, and they become so enamoured with their detailed solutions that they fall into the trap of encouraging adoption through autocratic means. Such means contribute little to developing creative dynamics in society and *they do much to increase resistance to change.* The power for development is not in the planner; it is in the ideas and dynamics of the people. The means used must *help to release* that power, not stifle or divert it.

Change Occurs in Stages

5. The planning and administration of change programmes should reflect greater recognition of the stages through which successful change usually occurs. Whether the change anticipated involves group or individual problem-solving, developmental

experience and/or learning, definite provision should be made for the fact that a particular innovation is seldom put into use in one operation. Rather, change is usually spread over a period of time, and what is done at any one time is in response to what has gone before and is in preparation for what should be done during the next stage. Administrators and change agents should be particularly sensitive to the need for readiness at the introductory stage and to the plateau stage which frequently occurs prior to optimum maturation or adoption.

While anticipation of staging in development planning is necessary, it must be kept in mind that the stages cannot be definitively determined ahead of time; rather, they grow out of the dynamic process of society in transition. The stages will differ from project to project, from client group to client group of the same project. Therefore, careful evaluation, analysis of experience, participant reaction and periodic replanning are a normal and requisite part of successful change programmes.

6. More attention should be given to the problem solving aspect of development. Educational innovations should emerge from attempts in problem-solving. The various stages in problem-solving need further refinement, particularly the early stage during which the problem must become truly the concern of the individual or the group. Also, help in devising alternative solutions and on systematic evaluation is needed. This method of dealing with educational situations helps to pass initiative to teachers and headmasters and to ensure deeper involvement in change efforts.

Recognize Individual Differences

7. In administering development projects, variation among individual persons' change proneness and rate of change should be anticipated and recognized as normal. In fact, such variations should be made use of as a contributing aspect of change dynamics. Innovators and early adopters can "pave the way" for those who accept change more slowly. The late majority can serve as a brake on too rapid and superficial change. *Differences in rate of change should be prevented from creating factions within a staff or group.* It will help if the total group takes part in planning, discussing and evaluating the experimentation of those who take up new ideas first. Planned cooperation and systematic communication throughout the group will contribute to more orderly and

more productive change efforts, assuming that individual differences are positively provided for.

Plan for Accumulative Effect

8. Planning at all levels should take into account the need for concentration, sequence and continuity. Unless each improvement activity contributes to a minimum critical concentration, is a part of a developmental sequence, and/or represents continuity for the clients, that activity is likely to contribute little to short-range or long-range goals. Furthermore, activities carried out more or less as ad hoc operations eat up resources and take up the time of workers in such a way that we are deluded into thinking progress is being made. Programmes planned for intensive impact will be characterized by projects which complement or supplement each other, by focus on one or a group of needs until they are satisfied, and by concern for bringing into being a self-generating continuity of growth and progress.

Anticipate Interaction Between Culture and Innovations

9. Planners and administrators of programmes intended to bring about specific changes should anticipate the ways in which introduction of the innovations into the culture will stimulate interactions and secondary changes. Some of these interactions and secondary changes may contribute to change goals; others may contradict the purpose of the innovation or otherwise produce disruptive results. These troublesome by-products should be anticipated if possible; where they are not, change agents and local administrators should be free to deal with them promptly and to report back to planners on the necessary adjustments needed in the change programme. Adjustments and accommodations may be needed both in the over-all programme as well as in the operation of it in any one school, district or state. New procedures, supplemented mechanisms or other change projects may be required to off-set the negative forces brought into play.

Use Group Dynamics Effectively

10. Research should be carried out to find out the ways in which the dynamics of existing groups in Indian society hinder or stimulate planned efforts to bring educational reform. The dynamics of social and educational organizations should be studied

in a search for ways of bringing the force of voluntary group activity into cooperation with improvement programmes. Such research should be taken up by the National Institute of Education and the colleges or departments of education of leading universities.

Improvement schemes should make use of the results of this research; furthermore, they should include a role for the leadership of voluntary groupings of headmasters, of interested leaders of society and of groups within the staff of individual schools and colleges who show interest in contributing to or initiating improvement ideas.

11. The effective use of group dynamics should be given careful attention in school teaching, in staff meetings, in workshops, training courses, seminars and conferences, and in the training of teachers, administrators and inspector-supervisors. Planned projects should include suggested ways of using group methods, and the directors and resource persons of these projects should be encouraged to use and to help participants learn the skills of group discussion and group work. The techniques under development for training purposes in the various institutes of management in the country should be carefully studied for broader use throughout education.

A caution may be in order. In a society so thoroughly imbued with authoritarian methods and values, it will take time to develop the attitudes, abilities and values necessary to support mature use of group dynamics. Too rapid introduction of group techniques is likely to be unsuccessful and lead to disillusionment and negative feelings towards their utility. These attitudes sometimes result in cultures less autocratic than Indian culture when enthusiasts for group dynamics suggest their use in more ways than many persons are able to accept. Group methods should not replace all other methods of developing and communicating ideas. They are, however, a desirable complement to other methods and their forte lies in stimulating and releasing creative interaction and building personal identification with group efforts.

Avoid Reinforcement of Avoidance Tendencies

12. Special research should be planned to look into the heavy reliance on protective mechanisms which characterizes so much public reaction to development programmes. It also charac-

terizes lower and middle level administrators of development projects who are expected to produce results which they cannot or do not produce. These protective devices help persons avoid responsibility, and the work of development projects is thwarted by pretence, obscurantism and unwillingness to discuss honest reactions to change influence. The tendency to fall back on traditional protective mechanisms should be openly discussed in seminars and workshops, and the evaluation of projects should include sensitive assessment of this factor as one reason for slow or negligent progress.

13. In planning development schemes it should be recognized that the cultural tendency to avoid responsibility, by putting forth symbols of progress or by corrupting the form and purpose of projects in ways which make them easy to accept, is reinforced by development programmes characterized by autocracy, unrealistic planning, inappropriate means, lack of concentration and continuity, and failure to anticipate the reactions of the cultural unit into which innovations are introduced. In other words, ignoring the best that is known about social dynamics and the process of successful change will not only lead to failure, it will encourage the refinement of skilled resistance to future planned efforts to bring reform.

SUGGESTED READINGS*

1. Arensberg & Nichoff, 1964, chaps 2 and 4.
2. Bennis *et al.*, 1962, chaps. 9 and 10.
3. Bhola, 1965.
4. Carlson, 1965, chaps. 4 and 5.
5. Carlson *et al.*, 1965 (a) chaps. 3 and 4.
6. Dubey, 1958.
7. Etzioni & Etzioni, 1964, chap. 38.
8. Gardner, 1963.
9. Heinrich, 1967 (Unit eight, series 2).
10. Johns, 1963, chaps. 8 and 9
11. Lionberger, 1960, chaps. 1, 2 and 3.
12. Lippitt *et al.*, 1958, chaps. 6, 7, ° and 9.
13. Miller, 1965, chap. 6.
14. Miller, 1965, chap. 14.
15. Niehoff, 1966, chap. 2.
16. Planning . . ., 1964.
17. Prasad & Juyal, 1966.
18. Rogers, 1962, chaps. 4, 5 and 6.
19. Watson, 1967, chaps. 2, 5, and 8.
20. Watson, 1967 (a) chap. 5.

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Generalizations
Introductory Comments
  Leadership More Than Administration
  Traditional Culture and Leadership
Discussion of Generalizations
  Leadership is a Critical Factor
  Support from Established Procedures
  Politics and Change Programmes
  Administrative Change Needed
  Support from Communication
  Planning Provides Leadership
  Interdisciplinary, Interprofessional, and Inter-agency Support
  Evaluation and "Feed-back"
Recommendations
  Improve Leadership for Change
  Use and Reform Established Channels and Procedures
  Increase and Improve Communication
  Plan from the Bottom-up
  Involve other Disciplines and Professions
  Plan, Implement, Evaluate, Replan

Leadership and Support :
Administrators and Groups

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*Of what use is a [new] law until those in a position to flout it
are mentally prepared for the change?*

*The Government is only a bucket. The people are the well. If
there is no water in the well, how can there be in the bucket? I go
to the source of water, the people themselves.*

— ACHARYA VINOBA BHAVE

GENERALIZATIONS

THE *following generalizations about leadership and support for
change will be discussed and illustrated in this chapter:*

1. Leadership is the most important single factor in encourag-
   ing and sustaining change.
2. Innovations introduced through recognized procedures for
   making decisions, through established administrative agen-
   cies, and with the involvement of respected leaders, usually
   receive greater support.
3. Leadership and support for change often depend on altered
   leadership roles, modified administrative procedures, and the
   establishment of new agencies.
4. Two-way vertical communication between leaders and
   followers, and lateral communication among related depart-
   ments, groups and individuals, are critical factors of sup-
   port for planned change.
5. National planning often fails because too little attention is
   given to the realistic planning and implementation of in-
   dividual projects at the local, regional and national levels.

as a basis for the national plan.

6. Full support for educational development depends on the cooperative and coordinated involvement of specialists in various related scholarly disciplines, professional groups, and departments of government.

7. Evaluation as an integral part of development projects, and feed-back of results in a sequential cycle, provides support for continuity in the pursuit of development objectives.

Incident A

An assessment team was taken to a secondary school well known in the area, where they were to meet with headmasters from the surrounding community. The purpose of the visit was to find out the effectiveness of various in-service programmes for teachers as a means of stimulating improvement in schools. The team members met the headmaster of that school, were taken on the usual round of the building, had a cup of tea, and then were taken to the library where other headmasters were assembled. All of them were from government schools. The furniture was arranged for the meeting, a raised platform was reserved for the assessment team, and paper and pencils were neatly laid out, enough for twice the number who had turned up. Introductions were made, the host headmaster said a few words of welcome, and the convener of the team explained the purpose of the visit and how the headmasters could help.

The discussion began with the usual questions about the amount of teacher participation from each school in the in-service programmes and how the teachers had benefited. The response was hesitant and the evidence of benefit was stated in very general terms. "Teachers enjoyed attending and they returned with renewed enthusiasm for their work." "All schools are interested in improvement and teachers get many new ideas from seminars, workshops and conferences."

At this point the convener of the team (who is well known for his kindly approach, but also for persistence in and depth of questioning) decided to turn the discussion to the headmasters themselves. "In what ways had they been helped?" This produced introspective looks, but no response. He stated the question another way. "What changes had headmasters brought in their own work or in the school programme as a result of the in-service programmes?" Still no answers. The headmasters looked embarrassed. Another member of the team, wanting to relieve the pressure, supplemented the question, making it more general; but the convener brought attention back to his more probing questions.

Finally, one headmaster stood up and stated that several years earlier he had attended a three-week workshop on examination reform. "Was he a headmaster at the time?" "Yes." "Did he enjoy the workshop?" "Oh, yes!" "Did he learn anything of value?" "Very much; the workshop was well managed and the resource persons were very knowledgeable." "Did he

get some experience in making improved tests in his teaching field?" "Yes, and he brought back test items developed by other participants who taught the same and other subjects; he still has the file in which these and other materials from the workshop are kept." "When he returned from the workshop *did he report to his teachers?*" "Yes." "*What was their response?*" "Some showed interest and others said these new ideas were impractical." "*Does he think they are impractical?*" "No, many of them could and should be used in teaching and in testing for promotion from standard to standard." "Did he work with his teachers to try out some of the new testing methods?" "No." "*Why not?*" "The State Secondary Board did not change the external examination system to include new type tests." "*Is not the individual school free to modify its teaching and testing within the school?*" "Yes, but the teachers did not want to waste time using tests that were different from the external examination papers. And besides, the methods of examination for promotion had been agreed to many years before among the headmasters of the city, and he could not change them in his school." "Could not?" "Well, he didn't think it wise to do so." "Did he discuss any new testing possibilities with other headmasters?" "No." "*Why not?*" "No orders to do so had come from the District Education Officer." "*Did he change his teaching and testing in his own classes?*" "No." "*Why not?*" "The local inspector discouraged it."

What support might have been provided for the headmaster so that he would not have hesitated to make use of what he learned about testing? How was his *initiative* inhibited by hierarchy? What would you have done if *you* had been in the convener's position?

INTRODUCTORY COMMENTS

Leadership More Than Administration

It has been said that Indian institutions and agencies are "over-administered" and "under-led". However accurate this statement is, it indicates a distinction between administration and leadership. Administration is for the purpose of keeping the organization running smoothly, efficiently and according to known criteria. Leadership is for the purpose of guiding the organization towards new goals, in the direction of desirable change, in the search for unknown answers to known problems. India has many able and efficient administrators. Administration is a profession of considerable prestige and status. It provides rewards and security. It has a long and respected tradition. Leadership is another matter.

Leaders of the kind needed for developmental change are hard

to find among administrators. Except for well-known exceptions, it is difficult to find the administrator who will break new ground, pursue a point with higher authority when the needs for change require it, who will encourage subordinates to experiment and innovate, who will support the work of associates which deviates from the normal in promising ways, who is himself willing to change, who is a man of action as well as thought, who puts personal interest secondary to public good, who is willing to challenge traditional values and customs when they stand in the way or to question the worthwhileness of schemes promoted only because they are fashionable, and who commands respect for his attention to major questions facing society as well as the day-to-day routines. Leadership of this kind is so obviously needed and so clearly lacking.

Support for innovating subordinates is needed from administrators who are leaders of change as well as administrators. This is especially true in a culture where authority is so strong and where traditions discourage action not endorsed by superiors. As discussed in the previous chapter, group members and associates can provide support for innovators and early adopters, but support from leaders is paramount. In Incident *A* above the headmaster took no initiative because his superiors did not encourage him to do so. Neither did he encourage his own staff. He was a prisoner of tradition both in his reaction to change influence and in his role as an administrator who might have been a leader. Someone must exercise the initiative required to make to break with the traditional system if change is to occur. The need for leaders who will do this may be the most critical need of India today—certainly of Indian education.

Traditional Culture and Leadership

In Chapter 2 we discussed some of the qualities of Indian culture which are controlling the speed and nature of development. Here we will review some of these qualities and suggest others that should be taken into account if ways of exercising effective leadership are to be found.

In Indian society several major traditional forces impinge on the individual, giving or withholding sanction for what he does or does not do. These forces characterize the setting within which needed leadership must function if it is to be effective.

One such force is respect for tradition and age. The older ways are better, many people still feel. The values of India's glorious past, even though many of them have long ceased to be operative, are revered. The unique Indian way, the way of ancestors, has worth which modern ways lack. Older persons as representatives of ancestral ways, are highly esteemed: their ideas are given credence over those of younger people. Their presence in many groups automatically relegates younger persons to a secondary role. This respect for tradition and age serves to enforce continuity in the culture, to discourage full exploration of new ideas. Sometimes innovations are accepted only when they are disguised as being traditional or in full accord with traditions. We have made it clear in Chapter 2 that we do not recommend turning away from traditions where they have a contribution to make to the India of tomorrow. We are concerned, however, when the force of traditional attitudes prevents careful consideration of ways different from those found in the heritage of the past.

Another force, related to the first, is hierarchy. Heirarchy results from a composite of factors which include age, class and caste, and position. Hierarchy is a system of rights, duties, deferences and amenities. A person's place in the system is more important than the person himself—his ideas, feelings and personal qualities. Among educators, for instance, a person's status in the hierarchy is determined by his years of service, his grade, his salary, whether or not he holds administrative office, the number and kind of degrees he has, whether he was a first, second or third-class pass, and his official position. Life is a constant struggle among the educated classes for higher and higher status. A man's status gives him the right to expect certain behaviour from those below him as well as the responsibility to fulfil the expectations of those above him. He knows to whom to defer, to whom to give in if there is a difference of opinion, to whom to pay respect if he wants to get ahead. The hierarchical system tends to discourage innovation and change because they pose a threat to the system. Generally, decisions on new ideas are more often made in terms of the system than in terms of the merits of the ideas.

Another force affecting individual response to alternatives is group membership. In the previous chapter we indicated how group influences can be a positive force if they are brought into

support for new programmes. The many demands of group commitments, on the other hand, often draw attention away from participation in causes of social betterment. A person is first a member of a family, then of a caste or community, a group of friends, a geographical region, and a professional or vocational group. Memberships in family and caste are often more influential than membership in professional or vocational groups. Membership in all these groups demands loyalties, responses, duties and roles in keeping with group traditions and interests. There is little room left for individuality; what a person does or does not do is more influenced by the expectations of these groups than by his own creativity, professional commitment, imagination or drive. A young man, for instance, is often so overwhelmed by the expectations of his doting mother that there is little room for his own character to show itself. These many duties and expectancies take so much of a person's energy, attention and time that they discourage the initiative and drive that are required for effective change or change leadership.

And then there is politics. Politics permeates everything, it is a factor in most development decisions, it plays a part in the operations of both old and new programmes. Everyone complains about politics. Educators say that politics should be taken out of education and that educators should get out of politics. They don't fully mean it; or, they shouldn't mean it. Politics cannot be eliminated in a democracy; it can only be improved through greater participation by people of principle and broad social purpose. This point seems to be overlooked by most educators and other professionals who complain about corruption in politics. Participation by more principled people is particularly important because government policy results more from personalities than from legislation or general principles. Rules and regulations are there, parliament and other legislative bodies meet, and principle is not altogether forgotten, but they don't dominate the process of government. Decisions are made through consultation, compromise and consensus among political leaders. Formal voting is seldom used because it is considered to be devisive. Decisions are not taken until all key persons are satisfied, until all the group obligations and responsibilities are accommodated. This system of decision-making is highly sophisticated and responsive only to persons of accepted standing and political skill. It is not an easy

arena for the amateur, particularly if he is an outsider. This presents a formidable challenge to any would-be leader of change. In this arena educators as such do not have a high standing. Educators are more victims of politics than participants in politics or a dominant force in decision-making. Individual educators have been known to be active and effective in politics because of family and other connections, not because they were leading educators. In fact, the Central Ministry of Education is usually considered among the weaker ministries, and Departments of Education in individual states are often subservient to other departments.

Still another cultural value that conditions leadership and support for change is tolerance. Emphasis on tolerance in Indian life seems to promote usual acceptance of differences, an attitude of "live and let live", recognition of many points of view, the practice of going about one's business and letting the other fellow do the same. Tolerance is a practical compromise with reality. Given the pluralism in society, the many shortages of material and human resources, the complexity of problems, the established system of group loyalties, and the deferences perpetuated by the hierarchical system of status and power, a person must develop many tolerances to find a comfortable, functional attitude towards life. Respect for and openness to accept another's point of view is conducive to change. This is the basis of what can be characterised as an important value of the Indian culture, the value of synthesis.

And yet, there is a discouraging side to this picture. Tolerance encourages complacency in the face of critical problems. Tolerance makes it possible to live undisturbed by contradictions which cry out for resolution for the sake of progress. Tolerance helps one to turn one's back on inequities which are a part of the status quo. Tolerance helps many people to accept compromises of convenience which do not serve the needs of reform. Tolerance encourages one to be content with cloudy standards, low levels of effort, form instead of substance, and evasion of responsibility. Also, it tends to cause acceptance of delayed decisions and postponed action. In fact, tolerance in Indian tends to be more of a passive than an active value, encouraging the ignoring of differences more than the understanding of, respect and esteem for differences. Failure actively to think through which

differences are consistent with national goals and which are not may be one of the chief causes of confusion and failure effectively to mobilize effort.

These and other traditional cultural values characterize the setting in which leadership and support for change must function if they are to be effective. In the discussion above we have not attempted to present a comprehensive picture of cultural values as they relate to development. We have attempted only to illustrate how the cultural setting conditions leadership; the change agent should develop his own understanding of predominant cultural values among the people with whom he works and how these values relate to leadership. Leaders must learn how to assert themselves within the cultural setting and by their leadership help to modify the inhibiting power of some traditions and to reinforce the progressive contribution of other traditions—thus gradually helping to alter the character of society.

DISCUSSION OF GENERALIZATIONS

Leadership is a Critical Factor

At one time or another many of the ideas discussed in this book have been thought of as the key to change. Readiness, felt-needs, group techniques, "cultural fit," and many others have been viewed as critical factors. Perhaps the position most supported by the recent studies and experience is that effective leadership is consistently a determining factor in successful developmental change. To go even farther, if any one factor is the key to change it may well be leadership.

There are many kinds of leaders, some more important than others in a given situation, but all are needed if they play their role positively in the interests of a better society. Leadership can be provided by the official representatives of government, appointed and elected. Leadership can be provided by many persons who do not occupy positions of authority but who are recognized as persons of influence because of their creative ideas, their social status, their religious authority, their personality, or because of some other personal quality. In selective situations, leadership is often provided by persons who possess special knowledge or skill sought by those wanting expert guidance. In any of these roles, the person who possesses a certain charisma, and can at-

tract a substantial following, may stand out as an effective leader.

Many programmes fail because of inadequate leadership. Many fail because they do not gain the blessing of accepted leaders Many fail because new leaders do not come forward to contend with those accepted leaders who look backwards more than forward. Many fail because effective leadership at one level is not matched by and coordinated with leadership at other levels, up or down or both.

The Indian social system gives great power to the leader. The system of hierarchy, the respect given to age and status, and the consensus-among-leaders system of reaching decisions, put the future of the country largely in the hands of a relatively small number of leaders. Added to this, the political-economic system of democratic socialism places most major development efforts in the hands of government. The recognized leader can make use of his power to foster desirable change and development, he can use it to maintain the status quo, or he can use it to serve personal or family purposes. If he is progressive-minded he can make use of his traditional power, he can effectively use the orthodox system of making decisions, he can use his understanding of the goals of development and his own sense of the direction in which Indian society should go, he can apply the best that is known about the process of change, and he can inject into decision-making the greater concern for broad social principle, for the merits of the given issue, and for the good of the community as a whole. He can do these things if he will, if he has the will and if he has the skill.

Positions of potential leadership abound in the Indian educational structure. For persons who are able to make the conversion from administration to leadership the opportunities are unlimited. The headmaster of a school is in a strategic position to give leadership to change—and illustrations can be found in both private and government schools where a headmaster has effectively assumed the role of leadership for experimentation and innovation. School inspectors, in some cases, have recognized their task of encouraging and supporting teachers who tried to do more than the routine expected of them. A few principals of colleges can be found who have become known for their creative contribution and to stimulus of experimentation and serious attempts to improve education. Some vice-chancellors can be identified who have become active workers for reform in university edu-

cation and who are recognized educational statesmen in the field
of political action for the support of education. Officials can be
found among the staff of state departments of education who are
committed to leadership which goes considerably beyond routine
bureaucratic administration. Among the several new types of in-
stitutions that have been brought into being in recent years can
be found staff members who understand and actively represent
methods and philosophies of work which promise to provide
effective leadership for change to schools, colleges, and state de-
partments of education. In these and other positions of powerful
potential can be found educational workers who are able leaders
of educational development. These leaders are subject to the many
forces which discourage new patterns and reform of old patterns.
They are subject to the many loyalties and responsibilities which
tend to compromise and dilute tendencies towards initiative. They
are touched by the many influences for conformity and inertia.
However, these leaders have found ways of mastering the many
opposing forces rather than giving in to them. There are such
leaders, but there are far too few of them.

It has often been said that when you find a school that
is obviously of higher standard, you will also find someone in
a role of leadership who cares about the school and is willing to
put out the effort required to raise the school above the routine
level of performance. In the recent assessment of secondary ex-
tension centres in training colleges, where a centre was found to
have a programme of significant service to secondary schools, the
results could be traced in large part to the interest and effective
support of the principal of the college. In those states where the
task of examination reform has been taken seriously and progress
has been achieved, it is because of the effective leadership of one
or more persons in the State Department or the Board of Secon-
dary Education.

There is ample evidence that the generalization suggested at
the beginning of this section applies to change in education, namely
that: (1) *Leadership is the most important single factor in en-
couraging and sustaining change.* Persons able to rise to the need
for effective leadership will be found among those formally or
informally educated to understand their own society in depth,
among those who have become professionally competent through
training or experience, or both, among those who have a commit-

ment and the energy to apply their knowledge and skill to real problems, among those who are students of the dynamics of social change and can design strategies of change which recognize what is known about the process of development, and among those who have a vision of an attainable tomorrow.

All aspects of Indian development require leaders with these qualities; educational development needs them more critically because of the dual role of educational leaders to "put their own house in order" as well as to prepare educated leaders of quality for other aspects of development—agriculture, science, medicine, government, industry and others. One can easily question whether many educational institutions or programmes are now contributing significantly to this purpose—indeed, question whether they were conceived and planned with this purpose in mind. Until very recently the prestigious University Grants Commission has not been significantly involved in the training of teachers or educational leaders. The new National Institute of Education is clearly charged with responsibility for the education and training of educational leaders. How well the NIE achieves its purposes is yet to be seen, but by itself this national institution cannot fully meet the need for effectively educated leaders throughout the country. A secondary role which the NIE is beginning to exercise through its several departments is to work with the teacher-training colleges, the university departments of education, the new state institutes of education, and other old and new agencies, to improve their ability to train effective leaders. Recognition of this responsibility among various institutions should result in curricula and teaching methods considerably altered as to purpose and effectiveness.

While education and training are essential for leadership, it is important to start with students who show drive, resourcefulness and ability. Both systematic selection of persons possessing leadership potential and carefully planned educational programmes are needed to produce able leaders in the number needed to spur and sustain social and economic development. Only recently is some attention being given to the identification of youth with special talents. This programme should be accelerated, new curricula and educational experiences planned, and steps taken to increase the number of able persons who are educated and trained to occupy positions of leadership in educational institutions them-

selves and in the other critical areas of Indian development.
Systems of scholarships and other financial assistance will un-
doubtedly be needed to lessen the loss of talent that now occurs,
and changes will be required in the criteria and procedures for
appointing persons to positions of leadership.

It is not our purpose here to detail new means for selecting who
shall be educated at the higher levels, new programmes for lea-
dership training, or ways of assuring that the best qualified leaders
are appointed to leadership positions. It is our purpose to under-
score the rôle of leadership in developmental change and to sug-
gest that new approaches are needed if improved educational
leadership and the improved education and training of leaders for
other aspects of society are to be achieved.

Support from Established Procedures

In Chapter 2 we discussed the proposition that change should be
viewed as development from within tradition rather than "a break
with the past". The main reason for this is that: (2) *Innovations
introduced through recognized procedures for making decisions,
through established administrative agencies, and with the involve-
ment of respected leaders, usually receive greater support.* There
are several reasons why this seems to be true. In any social sys-
tem there are recognized procedures for making decisions and
planning action. Such procedures can be found at all levels of
society and among all communities—local communities, tribal
groups, religious communities, state and national organizations,
interest groups, political parties and in all levels of government.
Influential leaders and powerful sub-groups play important roles
in these procedures. The resulting decisions and courses of action
are vested with authority in the eyes of people in general. Whether
or not they agree with the decisions the people tend to cooperate
with them, to "go along" because compliance is expected or be-
cause of the threat of punishment. On the other hand, new pro-
grammes introduced through procedures other than the traditional
ones and without the involvement of accepted local or group
leaders are not likely to be considered very important by the
people in general, or not acceptable because the new programmes
appear to be in conflict with accepted authorities. The same may
be said of new agencies—it is possible that they may not be taken
seriously unless they are given the blessing of established leaders

and are related to existing organs of authority.

We are speaking of support for innovations. It is also necessary to point out the danger of creating undue opposition to innovations. Established leaders who feel threatened by new programmes, procedures and agencies, may not only withhold support—they may actively oppose and successfully sabotage programmes with which they have no identification. In other words, established leaders, agencies and traditional social processes represent substantial forces for accomplishing or blocking change: it is better to have their support than their opposition.

In the second place, the reforming influence of new programmes on tradition and authority is lost if they are introduced through new channels. As we have said earlier, improved leadership may be the major need of developing countries. As will be discussed in the next section, administrative procedures are among the processes which critically need reform. One path is to replace established leaders and reform social processes first and then introduce new development programmes. Another is to by-pass traditional leaders, procedures and agencies. In many situations there is a strong temptation to follow one or the other of these paths, particularly where traditional patterns of leadership and procedures of authority are conservative, inflexible, and inhospitable to change. In fact, it may seem to be the only way to get something new started; and in some cases it may actually be the only way. Where this is true it is important to bring traditional authority and established agencies into the picture as soon as possible, as soon as their interest can be aroused, as soon as there is some evidence of results. In this way they can become a part of the whole process of rethinking, revising, experimenting and evaluating which goes along with the introduction of planned change, and their attitudes, values and ways of behaving can be brought under the influence of change.

In most cases, however, careful analysis of change programmes over a period of years indicates that in the long run greater progress is likely to be made by following the third path—the path through established channels and through involving accepted persons of authority from the beginning.

A case in point. In 1955 the All-India Council for Secondary Education was brought into being. Following the recommendation of the Mudaliar Commission, the Council took steps to initiate

a programme of in-service training for teachers and other extension programmes intended to up-grade secondary schools. Extension centres were established in secondary teacher training colleges, each centre being made responsible for improving schools in its area. A college staff member was appointed as coordinator, and administrative personnel were provided. Educational equipment, library materials and transportation were supplied. The All-India Council provided leadership directly to each centre through conferences, publications and occasional visits. In 1959 the Department of Extension Programmes for Secondary Education was brought into being to provide more organized leadership to the centres and certain standard programmes were developed for the centres to carry out.

State departments of education were represented in the seminars and conferences which led to the creation of this extension programme, district education officers and inspectors were encouraged to cooperate, and state education officers and university officials were represented on the advisory committee established for each centre. Inspite of these measures to involve established leaders and agencies, this new programme and the agencies set up to carry it out operated outside the established authority for secondary schools—namely, the state department of education and their subordinate system of regional and district education offices. The initiative did not lie with these recognized authorities. Rather, leadership for the programme came from a new national organization, the budget during the early years was provided directly to the centres, and the national leaders worked directly with the centre.

During 1964 to 1966 an extensive assessment of this programme was carried out by the officers of DEPSE with the assistance from foreign technical assistance experts (one of the authors assisted with the assessment), officers of the new National Institute of Education of which DEPSE was a part, and officers of state departments of education. The various reports from this evaluation reveal that many of the weaknesses of this programme stem, in part at least, from the fact that it was initiated through the establishment of a new agency rather than through the state department of education and with deep involvement of their officers. Nor were traditional procedures used for the introduction of this new programme, making use of the boards of secondary education, textbook committees, and directives from the directors of

public instruction. As a result a number of weaknesses were found by the evaluators which might have been avoided, in part at least. In many instances inspectors did not participate effectively in the in-service activities organized for teachers. In addition, they often discouraged teachers from trying new practices which lacked the endorsement of the state officials. They frowned on deviations from the curriculum and refused to recognize the need for reform in the teaching schedule, the curriculum or textbooks. Head-masters in too many instances did not take the extension pro-gramme seriously. They were content to depute teachers and took little initiative to follow-up on the innovations teachers wanted to introduce. Headmasters continued to carry out their administra-tive duties and gave little attention to leadership of educational reform; no person of authority told them that their responsibili-ties were broadened to include school improvement. Experimen-tation with teaching suggested by the extension coordinators was not supported by changes in textbooks nor in examinations planned at the state level, and so only the most enterprising tea-chers attempted significant innovation. Frequent transfers among teachers and headmasters, even in schools attempting educational reform, interrupted plans made to carry out long-range study of problems or try-out of possible solutions. No new funds were made available to innovating schools to provide materials and equipment necessary for new programmes. Some of these proce-dures were altered later, but the damage had already been done.

The extension programme was initiated as a way of bringing about reform in training colleges as well as in secondary schools. The assessment teams found little such reform, even in the col-leges most active in carrying out programmes for secondary schools. Too frequently the extension programme developed as an adjunct rather than a central part of the training college's responsibility. Too few of the college staff were involved in run-ning the programme and they provided little follow-up. The principal took little interest in many cases and provided no lea-dership on using the experience of in-service programmes to help the staff to identify weaknesses in their own training of teachers and initiate improvements.

After ten years operation of this extension programme there has been little impact on the state departments, on teacher training colleges or on universities. Few reforms suggested by the exten-

sion programmes have been officially endorsed and actively supported. Little official action has been taken to alter teacher training and thereby to halt the perpetuation of inadequate and inappropriate training curricula and methods. Few steps have been taken by state departments to recognize the validity of the programme, to strengthen it, to support it, or to initiate their own similar efforts. Few new positions have been created to give leadership to the extension programme or to coordinate state administration with school improvement efforts. Few regulations have been changed to provide funds, flexibility or recognition of school experimentation. School inspectors continue to carry out their inspection of schools in the traditional way, thus encouraging conformity rather than imagination, creativity and experimentation in the school.

The evaluation teams concluded that many of the weaknesses in this programme and the lack of impact on related agencies were a result of the failure to initiate the extension programme from within the agencies responsible for administering the secondary schools and controlling teacher training. It should not be overlooked, however, that there are explanations as to why this was not done. The record is not clear, but there is evidence to indicate a number of reasons why the other path was selected. State departments were already overburdened trying to keep up with the demand for more and more schools. There were strong political pressures for rapid expansion of schools. Educational officials were trained and experienced as administrators and inspectors rather than leaders of reform. The whole tradition of the state departments of education, and of all other government departments and agencies, is to maintain conformity with regulations, to prevent corruption and to adhere to precedents. The hierarchical system was in full command and little encouragement was given by officials at the top for innovation at any level. These are some of the reasons which undoubtedly entered into the initial decisions regarding the establishment of the extension programme.

Furthermore, there were undoubtedly some who felt that reform brought about through traditional bureaucratic dictation would be reform in name only. True reform, they reasoned, should come from the bottom and as the schools developed their own ways of improving education they would bring pressure which would result in change in rules, regulations, examinations, curricula and ad-

ministration. Unfortunately, experience indicates that change in an authoritarian, hierarchical society does not come about this way.

Looking back, it can be said that the extension programme for secondary schools has made a contribution to creating awareness of need for change, and much has been learned from experience that is now being taken into account in planning anew for educational reform at the national, state and local levels. Steps are being taken to involve educational authorities, to help them become educational leaders as well as administrators, and to make use of experimental programmes directly as an influence on change in regulations and procedures of administration. One way of accomplishing this is represented by the recently created state institutes of education. They are charged with operating closely with government officials at the state and local levels to bring about change from the inside. They are state, rather than national institutions, responsible to the directors of public instruction. They are assisted by the National Institute of Education but they are independent of national administration. Another way to accomplish similar purposes was represented by the plan of the Department of Field Services (the successor to DEPSE in the National Institute of Education) to establish in each state a field unit of the NIE responsible for helping each state department make full use of the programmes of the NIE, and to report back to the NIE on the problems at the state level and kinds of assistance needed. The field units of NIE were not state agencies; they were extensions of the NIE at the state level and they were under the administration of the NIE. It will be interesting to compare these two approaches over the next ten years to see which serves the purposes of educational reform more effectively—the state institutes established as state agencies or the NIE field units which maintain their national tie.

Politics and Change Programmes

Political agencies are another example of established institutions through which change programmes should be introduced if they are to be given support and be successful. On the statue of former President Nkrumah in Accra, Ghana was the inscription, "Seek ye first the political kingdom, and everything else shall be added unto you." This may be an over-statement, but it serves to highlight the critical importance of political and administrative skill.

In any society there are people of outstanding quality of thought and personality who are ineffective in the political realm. We all know persons who have promising ideas but who lack sophistication in the machinery and procedures through which ideas are translated into action. Such persons are defeated by the complexity of decision-making in their society and often become cynical about politics and administrative bureaucracy. This is often a weakness of academic men, of those persons whose major task is to deal with ideas and who can easily rationalize that it is other people's responsibility to convert ideas into reality.

In any society this dichotomy between the thinkers and the doers results in much impractical theorizing, on the one hand, and action that falls short of the best that is possible for want of an adequate theoretical base, on the other. In societies attempting rapid and far-reaching change the loss from this dichotomy is nothing short of tragic. In the field of education there seems to be a particularly strong tendency for leading thinkers to remain aloof from the social institutions and procedures of decision and action. As stated above, in India politics is the major arena for decision-making. If a person wants to wield power he must get into politics. If he wants to see some of his ideas translated into development projects he must not only get into politics, he must also develop ability in using effectively the processes of politics. If he is to become skilled in the processes he must become a student of those forces which characterize the setting within which decisions are taken and implemented. We have said about these forces in the introductory remarks above.

It was also stated above that Indian educators often decry the extent of politics in education and criticize educators who get into politics. As is too often true in democracies, the term "politics" has come to mean corrupt politics, politics for private gain and personal power devoid of public concern. These flaws in the democratic process will be there as long as human material wants and needs exceed individual ability to satisfy them through legitimate means. But the goal should be politics sufficiently free from corruption to command respect and loyalty from a majority of citizens. Someone has said that "Politics is like the weather: everybody criticizes it and nobody does anything about it." This need not be true, and one way to "do something" about politics is for educated persons of principle and social purpose to get into

politics and work at improving it from the inside. Educators have a definite responsibility here.

The improvement of politics cannot be done by the educated élite alone, however. One of the goals of development is to bring into the decision-making processes larger numbers of persons at all levels—persons of diverse backgrounds and levels of education. In this way development is given a broad base of support through the participation of more and more citizens in the making of decisions which affect their individual and group welfare. This means a broader base of involvement in politics by educators at the national, state and local levels, an involvement that should be directed towards improved development programmes in education and other dimensions of society. Such use of politics as one of the principal established channels for determining social policy and programmes should be given serious consideration by individual educators and by organized groups of educators.

Administrative Change Needed

We have said that innovative programmes are more likely to be given long-term support if they are introduced through established agencies, with the use of traditional administrative procedures, and with the involvement of recognized leaders. There is another side of the coin. (3) *Leadership and support for change often depend on altered leadership rôles, modified administrative procedures, and the establishment of new agencies.* It is suggested above that one benefit from introducing new programmes through traditional channels is the reforming influence that would accrue. What are some of the reforms that are needed?

Altered Roles Needed. We have said something above about the difference between administration and leadership. Traditional group leaders tend to serve the purpose of maintaining cultural traditions and preserving a way of life. They inhibit non-conformism and they discourage new ideas among the young. Government officials tend to police, inspect and administer because their rôle traditionally is that of making sure regulations are adhered to and corruption is held to a minimum. Their rôles serve the purpose of ensuring that life goes on according to a set pattern. They are told what to do and they tell others what to do in a never-ending series of routine procedures designed by authority to maintain a system.

Leadership and support for change require changes in these rôles. Instead of blindly serving tradition and authority, traditional leaders and government authorities can become leaders of the country's developmental plans. With an understanding of possible new directions they can help their group members and subordinates to break out of a "set" way of thinking and doing, encouraging them when they question traditional ways and providing an environment of security when they attempt to experiment with new ideas. In fact, traditional leaders and administrators can set an example in the way they react to various proposals for innovations from outside groups or development agencies. Instead of immediately reacting conservatively—trying to find all the reasons why the new idea is impractical and cannot be considered, they can given the prospective innovation a fair hearing—carefully examining what contribution it might make to progressive goals, and, if good possibilities are seen, devising ways in which the innovation can be given a sympathetic try-out. They can serve as mediators between old and new. This responsibility represents a change of roles that should take place among religious leaders, leaders of private social organisations, tribal and village headmen, and informal leaders; and among government authorities and leaders at all levels, including educational officials from the headmaster of a small school to the Minister of Education in the Central Government.

INCIDENT B

A Joint-Director of public instruction and a consultant from a Central Government agency were riding along the road in a remote section of one of the states. Among the people along the road were some children returning home from school. All of a sudden the Joint-Director ordered his driver to stop and back up to a small side road. He then instructed the driver to drive up the side road at the end of which was a school. He was agitated about something but he was too tense getting to the school to inform the consultant as to the reason for the detour. When the jeep pulled up to the front of the school he ordered a child just leaving the building to summon the headmaster. When the headmaster appeared the Joint-Director launched into a diatribe through the jeep window which left the headmaster trembling. Two or three times the headmaster tried to interrupt, apparently to explain something, but he was not allowed to continue. When the Joint-Director finished he took down the name of the headmaster and ordered his driver to turn around and drive away.

All of the above was carried on in the regional language so the con-

sultant was confused as to the problem. Shortly the Joint-Director proceeded to explain. Some of the school children seen along the road were not wearing the standard school uniform. This was against state regulations. The headmaster was supposed to enforce the wearing of the uniform; obviously he had not followed orders—or he had allowed certain parents to get away without complying. The Joint-Director insisted that the headmaster would have to be punished. The consultant wondered out aloud what the headmaster's story would have been if he had had a chance to explain. The Joint-Director answered that the headmaster would have given the usual excuses—parents could not afford the uniforms, or they were being laundered that day, or some other flimsy excuse.

Is the authoritative role played by the Joint-Director an appropriate part of a strategy for change in the school system? Is this headmaster likely to cooperate readily with change programmes initiated by the state department? Will he be a source of feedback ideas on how regulations or procedures should be changed to improve school administration? How might the Joint-Director have played his role more constructively? Or did he do the proper thing?

The above described visit by the Joint-Director an appropriate part of a state official to a school may not be too unlike a "surprise inspection visit!" Perhaps the school inspector's rôle is among those most needing reorientation—as it is carried out during regular inspections as well as "surprise" inspections. We have mentioned in the previous chapter how inspection tends to encourage pretence and camouflage among teachers, students and headmasters. It also tends to produce conformity, and forced conformity may be the greatest enemy of invention, experimentation and change. Some inspectors—a minority of very able persons—have found ways of playing the traditional rôle without inhibiting innovation among school officials and teachers, but what is needed is a fundamental change in major aspects of the rôle.

Inspection is intended to improve schools by enforcing compliance with standards. The standards are set by high-level officials and inspectors are to see whether or not they are lived up to. If not, the headmaster or teachers are punished. And this is supposed to lead to improved education. This approach may contribute to the maintenance of standards as to the care of school property or the administration of funds. It probably contributes

little to stimulating teachers and helping them to put their best into teaching. In Chapter 3 we discussed motivation and made the point that teaching is the kind of task that requires inner motivation. A teacher improves when he sees the need to change, understands what can be done to improve, and is motivated to put out the effort required to alter his way of teaching. This inner motivation does not often result from authoritatively enforced compliance with standards set by higher officials. It is more likely to result from visits by superiors who are sympathetic, who draw out teachers' interests and problems, who offer helpful suggestions but do not dictate, who encourage teachers to talk with other teachers about common problems, who recognize and reward teachers' initiative and creativity, who defend non-conformity which is directed at finding answers experimentally, and who behave more as supporters than as critics.

Traditional inspection makes little contribution to maintaining standards of even a minimum nature when it is carried out only once or twice a year unsupported by other procedures. Nor can the suggested new rôle be successfully carried out unless contacts between inspector-supervisors and schools are more frequently made. Ways must be found of increasing the amount of time available as well as altering the nature of the rôle of inspection. Part of the answer to the problem may be found in changing the rôle of headmasters also so that they can give more time to working with teachers as supervisors. To accomplish this requires changes in regulations and lessening of paper work so that more time is available for academic work. This leads us to the next kind of change required to increase leadership and support for planned innovation-change in administrative procedures and the regulations on which they are based.

Reform in Administrative Procedures. There are many illustrations of needed changes in administrative procedures. As innovations are brought about in teaching and school organization, alteration of supporting procedures are required. Teachers, headmasters and other personnel are frequently transferred from one position and/or place to another. There may be good reason for most of these transfers, but they seem to be made in most cases without considering the negative effect on planned change. Such frequent transfers make it difficult for a headmaster to develop his teachers into a working team. They interrupt school improvement

projects which require continuity over a period of time to be successful. They make it impossible for personnel to get to know each other well enough for cooperative relationships to develop. They make it difficult for teachers and administrators to become adequately acquainted with the community and with parents.

The common practice of assigning rank to each position often makes it necessary for a person to change jobs to gain earned promotion. It should be possible for a person to move up several steps without transfer to another position, so that he can continue to grow in his ability to do a particular job and contribute more because of this growth. This is one of the many reasons for frequent mobility which should be reduced to provide more consistent leadership for development.

Procedures for assigning and enforcing responsibility for government need review. Schools and colleges have many teaching materials and supplies which are kept under lock and key and seldom used. Libraries are too often places for the storage and safe-keeping of books, not agencies for circulation of books. Science laboratory materials are kept locked up for fear they will be broken; in many instances they are displayed only when there is a visit to the school by a dignitary or official. In one school visited by one of the authors this problem was "solved" in a curious way. Science charts were systematically hung on the walls, in fact, all the charts available were displayed; they were hung out of reach, however, high enough to be protected and too high to be used for teaching purposes. This is a knotty problem when materials and supplies are in short supply. As the use of teaching materials is more and more recognized, experimentation with means of maintaining responsibility should be encouraged. It is not our purpose here to solve this problem, but rather to illustrate the need for adjustment in administrative procedures to give support to improvement in teaching and the improved operation of schools and colleges.

New Agencies. Leadership and support for change also require the organization of new agencies to complement those in existence. In the previous section we have emphasized the importance of working through established agencies, but it is sometimes not reasonable to expect established agencies to take on all the new functions that are necessary to mount and support a programme of change. The older agencies may not be able to alter their tra-

ditions and regulations enough to launch a new programme successfully. They may not have or be able to recruit personnel with appropriate qualifications. Or, there may be no established agency whose responsibilities cover the area represented by the innovation. Where related agencies do exist, the initiation of new agencies should be planned and carried out with their close cooperation, and major effort should be put into building and maintaining close liaison between old and new agencies. This can be done through shared planning and cooperative programming, among other techniques. Unless the older, related agencies develop some identification with the new ones and their activities, appropriate lasting integration will not develop and the new programmes will be that much weaker.

The history of the establishment of a number of national agencies during the early period of independence is worth noting on this score. We have already discussed the history of the secondary extension programme initiated by the All India Council for Secondary Education. Similar stories may characterize the experience of the programmes launched by such other agencies as the National Institute of Audio-visual Education, the National Institute of Basic Education, the Central Bureau of Textbook Research, the Central Bureau of Educational and Vocational Guidance, and other agencies brought into being during this period. These agencies were neither functionally integrated with existing state and local agencies responsible for what happens in schools and training colleges nor with each other. Isolated and sterile programmes resulted, for the most part.

During recent years attempts have been made to enlist the close cooperation of established agencies in launching new ones and carrying out new programmes. The Examination Reform Unit of DEPSE has increasingly worked closely with boards of secondary education in the various states. The Central Ministry of Education worked closely with the state departments of education in launching the new state institutes of education. It is hoped that the National Institute of Education will work closely with state departments in establishing field units at the state level to assist the states in extension work. Full cooperation between the Central Government and its agencies, and state and regional agencies will not come about readily, but a step in the right direction is indicated in the recent joint action on a number of fronts.

Support from Communication

INCIDENT C

As a part of their annual planning for technical cooperation in education, the head of a national institution for educational leadership and the chief of a cooperating American university team decided to recruit an American consultant on the teaching of a secondary school subject. Careful plans were discussed for the use of the consultant—with whom he would work, how his contribution would be coordinated with other agencies working on improving the teaching of the same subject, and what technical equipment and educational materials would be needed to support the consultant's work.

The usual period lapsed between the decision and the consultant's arrival in India. Special qualifications were required and recruitment was complicated. At last a consultant was located who had the requisite academic qualifications and experience in the teaching of the school subject in other Asian countries. In fact, the man selected had family roots in India. The week the consultant arrived the chief of the university team was out of station. Anticipating the arrival of the consultant, he asked one of the university team members to meet the new team member, get him settled, and introduce him to prominent Indian officials with whom he would work. When it became time to introduce the consultant to the head of the national institution who had requested his services it was discovered that the head was also out of station. Therefore, it was decided that the new team member would accompany two of his associates to the offices of one of the departments with which the new consultant was to work and they would introduce him to the head of that department and his staff. Such an informal procedure was not out of the ordinary.

The head of the department was completely taken off guard when he was introduced to the new consultant who had been recruited to work with him. He quickly recovered from his surprise, however, was gracious and informative on questions put to him, but those who knew him well could tell he was still bothered. Afterwards it was learned that the department head had not been involved in any of the planning for the use of the new consultant. Futhermore, he had not been told that such a consultant was due to arrive.

Another department of this national institution was also doing some work to improve the teaching of the same school subject, particularly through extension programmes. It was learned six months later that that department did not know that a consultant had arrived to give assistance in the subject—this in spite of repeated requests for assistance. On the other hand, other foreign technical assistance agencies interested in the teaching of the school subject were informed, had anticipated the arrival of the consultant, and had made some plans on how their efforts could be coordinated.

Is this an example of poor communications, authoritarianism,

poor planning, or all three? What steps should have been taken before the new consultant arrived? Who is responsible for communication in such cases? Or, does is matter that interested parties on the Indian side had not been informed?

During a stage of unusual change an institution takes on characteristics which normally are less evident. Insecurities develop among the staff. Each staff member wonders if he will be next to be transferred or dismissed. The orthodox criteria for judging one's performance seem no longer to be valid; new ones are not clear. Junior officials are worried unduly about how superiors evaluate their work. Senior officials fear that junior staff members are taking advantage of uncertainties. New programmes are introduced which challenge the traditional ways of working; no one is quite clear about the purposes of the new programmes or why the old programmes were abandoned. Before, it was clear whom to see to get something done, or to obtain a favour. Now there is hesitance, for lines of loyalty seem to be shifting. Tensions develop. No one is quite certain what is expected of him.

During such periods of stress and strain it is most important that communications from top to bottom be open, comprehensive and informative. Information goes a long way to remove insecurities and tensions. Each person in the echelon needs to know what is going on, what new programmes are being planned, how his rôle may be altered. He needs to be able to find himself, he needs to be able to anticipate new expectancies, to prepare for changed responsibilities. He needs to be taken into confidence, to feel that he is trusted, that his efforts will be recognized. Unless he is kept informed he will tend to be defensive, to withhold full cooperation, to behave in a protective, conservative way. For these reasons administrators at the upper levels should give serious thought to the many ways in which they can keep those below them informed on innovations that are planned and what their rôle will be in introducing them.

In Incident C about the head of the institution did not keep his department head informed. It is interesting to speculate on how this affected the department head in his work. If he was a traditional government worker he might not have been upset. He might have accepted the informal introductions to the new foreign advisor and waited patiently for orders to come from above to take the

necessary steps *to put the advisor to work.* If, however, the department head took seriously his responsibilities for leadership during a period of change, he should have been disturbed that his superior had not taken him into confidence and at least informed him of the plan to request an advisor on the teaching of the school subject in question. He might also have wondered why he was not asked to participate in planning how the advisor would be used. Under the circumstances he is very likely to be put on the defensive, to feel insecure and "left out", and as a result to be less than enthusiastic in welcoming the foreign advisor. In fact, a barrier may result which the advisor will have difficulty in crossing for some time, and his contribution will therefore be delayed and lessened.

There is another reason why communication must be kept open, particularly during a stage of change, up and down the ladder of an organization. *Successful change requires creativity—creativity at all levels.* New ideas generated by all persons should have a hearing, they should be communicated to other workers and taken into account in planning innovations. Each person should feel that his ideas are valued and will be considered, he should be encouraged to feel he has a part in the process of rethinking and reconstructing society. He needs to know that if he wants to try something new his efforts will be sympathetically watched by superiors, that they are interested in knowing of his attempts to experiment. He needs to know that communication lines are open and that he will get support for sincere efforts to innovate.

Innovation also requires cooperation—cooperation from those above and those below the innovator. *Cooperation is impossible without communication* among workers interested in common problems. It is not guaranteed by the sharing of information, but *it is made possible. The experience and knowledge of different people can be brought together in cooperative efforts to solve problems—if the interests of different people are made known through communication.*

It has been said that *if the best practices now being used in some schools in India were spread to a larger number of schools, education would be improved many times over.* There are many reasons why most schools fall far short of the best schools, and one of them is lack of communication. *The good practices of in-* dividual or groups of schools are not made known, there are too

few means of spreading them, and the importance of spreading them is not adequately recognized by educational leaders. One of the services preformed by extension workers, as they go from school to school, is to spread information about what other schools are doing. This is particularly effective when the extension worker does this in connection with a specific need. If he visits a school which is trying to improve discipline, it is helpful if he can relate how several other schools are approaching the problem, for instance. Effective inspectors perform this function also; but there are too few such workers, and too few other means to spread information on school improvement projects. Perhaps greater attention should be given to this aspect of communication through conferences, competitions, publications and radio. Through improved sharing of experience greater support for change can result.

Still another need exists for improved communication. Within the same organization, one department or group of workers is often ignorant of related work being done by other departments or workers. In Incident *C* was see how long it took for one department to learn of the presence of an outside advisor who could give assistance to their work. This is not an uncommon occurrence. Frequently educational workers accidentally learn about the work of associates which, if known earlier, would have influenced their plan of work. A major responsibility of heads of institutions is to make sure that communications operate to keep all departments informed on the work of other departments. In a small organization where good human relations exist among the staff, informal means may be satisfactory. In larger organizations or institutions it will be necessary to set up more formal methods to complete informal means of keeping various groups informed.

An added note is in order. Communications can help to educate all workers as to the purpose and methods of improvement programmes. Where this is effective the transfer of key leaders to other responsibilities has a less negative effect. The staff remaining can provide continuity because they understand the programme. Progress does not need to come to a halt until a new leader takes up his duties.

Persons who serve as agents of change should give priority in their work to improving communications up and down the ladder of command and within individual institutions. They themselves

can serve as communicators, but they should *not* stop there. The institutionalization of communication techniques should be his larger goal. To build among the administrators an appreciation of the need for keeping everyone informed will be one task. Another is to build the kind of human relationships that encourage open communications. Another is to help develop new means of communicating, or new ways of using known means. Exchange visits among the schools is one way that might be expanded. Professional periodical publications devoted primarily to reporting promising school practices may make an added contribution. Possibly each workshop or seminar should include a discussion on ways of *maintaining contact afterwards* among the participants—particularly among those participants who have common interests. Means of providing for "feed-back" from experience on the job to those evaluating the success of programmes are necessary so that new programmes can be more intelligently planned.These are some of the ways agents of change should bring improvement of communication into their work.

This leads to the conclusion that: (4) *Two-way vertical communication between leaders and followers, and lateral communication among related departments, groups and individuals, are critical factors of support for planned change.* Agents of change can contribute much in the short run to increasing communication: in the long run, they can make their best contribution by helping to institutionalize effective communications mechanisms and procedures.

Planning Provides Leadership

Systematic planning is another important vehicle for leadership of change. Before World War II only the Soviet Union planned her development systematically. Since the end of the war the number of countries taking up formal planning has increased until at the present time only a few do not have a planning organization at the national level which periodically produces the "plan", usually on a five-year basis. Planning for education is a normal part of this process, and increasingly educational planning is meaningfully integrated into the total plan in terms of man-power needs and desired changes in social attitudes and cultural values. However, economic considerations continue to dominate planning in most countries.

There have been short falls in formal planning. There are several reasons for this. Too often political leaders and government administrators fail to imbue the people generally with an understanding of and commitment to their country's development plan. Political leaders often give priority to other matters, sometimes for reasons of expediency and sometimes simply because other matters seem more important. Among these other matters can be included international politics, nationalism, regional conflicts within a country, and emergency problems such as the recurrent food shortages in India. It can be understood how one or more of these matters can divert the attention of leaders, but successful results with planning cannot be expected if it is continually given a low priority. Unless political, administrative, *and educational leaders* show their deep commitment to planning by the attention they give to plan objectives in carrying out their responsibilities throughout the year, the people are likely to show little interest in implementation.

Going further, the experience of the past ten years indicates strongly that: (5) *National planning often fails because too little attention is given to the realistic planning and implementation of individual projects at the local, regional and national levels, as a basis for the national plan.* This generalization is meant to convey two critical ideas. In the first place, the planning of projects should *precede* the formulation of the national plan, and in the second place, the national plan should include provision of those elements necessary for the implementation of the projects. This assumes, of course, that the broad goals of development are understood and taken into account in the planning of projects. Project planning should realistically face up to such matters as budget, manpower needs, administrative innovations, and phasing requirements. These items should be provided for in turn in the national plan and in the steps taken to implement it. In other words, *the sequence* and *the mix* should be reversed. Micro-planning of individual projects at local, regional levels should come before the formation of the macro-plan at the national level, and as much emphasis should be given to the formulation of project plans and their implementation as to the formulation of a carefully integrated, comprehensive and balanced national development plan.

The late Prime Minister Nehru, who also served as Chairman

of the Planning Commission, has been quoted as saying, "We in the Planning Commission... have grown more experienced and more expert in planning. But the real question is not planning, but implementing the plan...I fear we are not quite so expert at implementation as at planning..." This statement rightly recognizes that implementation may be more difficult than formulation of the plan, but the *dichotomy indicated by Pandit Nehru* is unfortunate. He was not alone in separating "planning" from "implementation": in fact, this was, and still is, an attitude common among government planners in most developing countries. As a result too much planning has been done at the top by national planning agencies who feel little responsibility *to foster the careful planning of projects among local, regional and national agencies, to select only soundly conceived projects with high yield potential, to make policy decisions in terms of these projects, to assign the necessary resources with accuracy, including foreign exchange, to lay down realistic schedules for the phased execution of the projects, to plan for the necessary training of manpower, to modify budgetary procedures and controls, to reorganize administrative units, and to assign and supervise responsibility for the orderly completion of projects.*

Planning in India is undoubtedly more sophisticated than in most under-developed countries. The first Five Year Plan, although put together in a hurry, provided early experience following independence, and by now the fourth plan period is well along. Not only has this experience been gained *at the national level,* preliminary planning has been done in each state as a basis for national planning, and various ad hoc regional committees and commissions have been established for planning purposes. Nevertheless, the generalization stated above is applicable to the Indian situations—there is even in India a tendency not to distinguish between planning for change and bringing about planned change, as *Pandit Nehru indicated. National planning would be more effective in given leadership to change if, in more cases, it were based on carefully planned projects and if it provided the wherewithal to implement those projects.*

In retrospect, the implementation of the Mudaliar Commission recommendations, for instance, might have been more fully carried out if individual projects were planned, based on the broad goals set forth by the Commission, and if the needs of these pro-

jects were reflected in the second and third Five Year Plans. Let us take the recommendation that secondary schools should be converted into multipurpose secondary schools. The planning of one project to convert a segment of the schools in one state, if systematically thought through, would have revealed the funds required, the size of the task of retraining teachers, the amount of foreign exchange required to import equipment not available in India, the need for foreign advisors, the need for new textbooks, the major attitude changes involved among teachers, parents and university officials, the employment position of students coming out of multipurpose schools, the adjustments required in other parts of the educational and social systems, and other related problem areas. Furthermore, if one such project had been piloted and carefully evaluated, the information required for realistic provision for conversion to multipurpose schools in the national plan would have been available.

To take another example, the experimental projects scheme of the Department of Extension Programmes for Secondary Schools might have been more successful if the national plan and machinery for handling it had been based on the planning and implementation of sample projects at the local school level, followed by the detailed planning of a state-wide project to encourage experimentation in schools. The planning and implementation of local and state projects would have revealed the many complexities of the process of promoting school experimentation which could then have been provided for in a national plan. Undoubtedly, a national scheme based on project planning would have given greater attention to the cooperation required from state agencies and from extension centres.

The plan to establish State Institutes of Education is an example of a plan well-conceived theoretically but with inadequate attention given to the machinery required to bring the plan into promising operation. Experimentation with just one State Institute would have provided detailed knowledge of the personnel problems, the programme planning difficulties, and the kind of leadership needed from the National Council of Educational Research and Training. This experience could have been used to lay out a more realistic plan with provision for support from State Departments, universities, and national agencies. The initial failure to designate an established unit of the NCERT to provide

leadership was an important reason for a faltering beginning of this plan.

Theoretically sound national plans do little to promote planned development unless they are based on realism, realism that takes into account all of the factors of change discussed in this book, including readiness, cultural appropriateness, client-leader relationships, group and social dynamics, administrative support, and evaluation processes. These factors can be more intelligently recognized and provided for in macro-planning at the national level if the micro-planning of specific projects and the piloting of these projects precedes the formulation of the national plan. By now, there should be adequate experience with short-falls resulting from impatience, to take the slower, more patient path that seeks realistic data and experience as a basis for broad and long-range planning.

Interdisciplinary, Interprofessional, and Inter-agency Support

Several years ago one of the authors had the privilege of sitting in on a conference in New Delhi on the contributions of the various social and behavioural disciplines to social change. As the conference proceeded it became obvious that there were many blocks to full communication among members of the group. Some of these blocks resulted from differences in cultural and national background, since the group been assembled from all over the world. There were also blocks resulting from the wide variation in experience in studying change. Some of the anthropologists, for instance, had studied change in simple island or village societies, and some of the sociologists had experience only in studying change in very complex, modern societies. The social psychologists had worked mostly with processes of group behaviour. Gradually the hindrances to understanding resulting from these differences seemed to diminish. However, another source of difficulty remained throughout to limit the full exchange and development of ideas. This block to understanding stemmed from the differences in approach, methodology, basic assumptions, priorities, and terminology among the various disciplines and professions represented in the conference. The sociologists were not understood by the economists. The economists failed fully to appreciate the approach of the anthropologists. The political scientists were more or less ignorant of the concepts discussed by

the social psychologists. Although the educators understood much of what was said, they, in turn, spoke from assumptions unfamiliar to most of the others. Although the conference made a limited contribution to the understanding of social change, one of the main conclusions was that such a group could not work together with full effectiveness until they learned to understand each other.

The above illustration indicates a tragic state of affairs among social and behavioural scientists and related professionals. This situation is compounded in many places, including India, by a lack of interest on the part of many scholars in communicating outside their narrow disciplinary or professional area. So the sociologists talk only to themselves, the anthropologists only to other anthropologists, the political scientists only to themselves, etc. Probably as much as any group, educators are isolated from other scholars, and they from educators. There are many reasons why this state of affairs has developed historically, in India and other countries, but we will not go into these reasons at this point. However, we want to deplore the fact and argue that it must be corrected if planned educational development is to receive the support it needs for success.

Earlier in this book we have stressed the interdependence of all elements of society. We have indicated how when one element of a social system is altered the change reverberates throughout the system. We have called the attention of the change agent to the need to anticipate these secondary results of planned innovation, and to take steps to counter or accommodate them, depending on their effect on the improvement intended. To deal with the many ramifications resulting from change in any one branch, requires the knowledge and expertise of scholars from many areas of learning. To put it another way, any social problem has many angles, a complex of causes, and many sources of solution. To deal adequately with the problem requires ideas from various specialists. Solution to the problems of education requires particularly the knowledge, perspective and skill of a variety of social and behavioural scientists.

In view of this interdependence among areas of society, it seems safe to generalize that: (6) *Full support for educational development depends on the cooperative and coordinated involvement of specialists in various related scholarly disciplines, professional*

groups and departments of government. This generalization rests more on speculation and negative experience than most other ideas put forth in this book. The fact is that in few cases, in other countries as well as India, have the potential contributions of scholars of the various scholarly disciplines been brought to bear effectively on educational planning. Nor has there been much experience of cooperation between educational planners and professionals in medicine, agriculture, public administration, law, engineering, and social work. Furthermore, although there has been progress in integrated planning, there has been too little success in closely relating planning for educational progress to planning for progress in the other sectors of society. This weakness may be one of the foremost reasons for shortcomings in the content of educational programmes and in the orderly improvement of the educational system.

Let us look briefly at the potential contributions of specialists from other scholarly and professional areas.

Cultural Anthropology. The anthropologist is a student of the culture of a society. He is sensitive to people's traditions and values which relate to development. He is peculiarly qualified to participate in formulating long-range goals which reflect the social and cultural needs of a society. He is aware of those traditions, values, taboos and beliefs which stand in the way of the development of a modern society, and those which are supportive of the goals of modernization. He can advise which elements of society need to be maintained in order to provide for stability during the period of rapid development. Although there are no clear-cut guides as to which traditions and values are good and which are bad, the anthropologist can assist in planning and implementing educational programmes which contribute constructively to the process of cultural and social reorientation. He can also help to anticipate the effects of these programmes as they interact with cultural elements, so that plans can be made to eliminate blocks to progress or to accommodate the interests of groups which seem to be threatened by educational change.

Sociology. The sociologist is equipped with several types of tools, with knowledge of group behaviour, population trends and public opinion, and understanding of relationships among the various units of social organization, all of which are important to educational planning and the implementation of plans. Techni-

ques involved in doing manpower studies and public opinion
surveys, for instance, are helpful in planning schools in terms of
training needs and public expectancies. Knowledge of family pat-
terns and child-rearing practices are relevant in planning the social
dimensions of the school. Many sociologists have become scholars
of the process of change, particularly of the psychological factors
and group dynamics involved. These are some of the skills,
knowledge and understanding the field of sociology can contri-
bute to educational planning and development, and without these
contributions educational planning is partial.

Economics. Although the recent trend is to down-grade the
importance of economic factors in development, the actual need
is to put these factors in perspective. The economist helps to put
realism into planning by interpreting to educational planners the
overall economic development plans of the country within which
educational planning is to be done, and by keeping continuous
focus on the resources available to education in the face of other
priorities. Very often manpower specialists are found among
economists, and they can help to relate educational priorities to
present and projected needs for trained manpower. Studies of
taxation for schools and other sources of financing education
should be done by economists. In addition, since improved eco-
nomic standards are among the long-range development goals
of any country, the economist is equipped to play an important
role in defining the goals of educational planning.

Political Science. We have said earlier that politics is all-im-
portant in the achievement of educational planning objectives.
We have also said that it is important for educators to understand
and to work through government agencies, as well as to take
private initiative wherever possible. The political scientist brings
to educational planning knowledge of the organization of govern-
ment, understanding of the power structure which must be pene-
trated by educators, and skill in making use of procedures of poli-
tics and government. He can help educational planners to under-
stand the political setting in which educational planning is carried
out, and to design social and political structures and organizations
which have optimum chance of being successful in implementing
development goals. We have said that educators should do less
to deplore the pervasiveness of "politics" in educational matters
and more to become effective politicians themselves. The political

scientist can help educators to learn how to plan in terms of political power and how to influence political forces to the benefit of educational development. Scholars of political science, which includes specialists in public administration, can help lay plans for the improvement of bureaucratic procedures which often throttle the best of development schemes. In a country with the hope of maturing a democratic form of government and society, such as India, the political scientist can make a definite contribution to the planning of educational goals and content. Education for democracy is often starry-eyed and impractical; political scientists can help to make it practical and realistic.

Social Psychology. The social psychologist is a specialist in many psychological aspects of society which are important to change. He can help to anticipate the emotional reactions of people to innovations in the educational system. He is aware of problems of motivation, how insecurity can immobilize individual and group effort. Many social psychologists are specialists in methods of training needed in in-service programmes for educational development, methods that are conducive to introspection and value analysis among educational leaders themselves as well as clients of change programmes. This expertise stems from studies and experiments with group dynamics which is an area of knowledge and skill very essential in planning ways of implementing educational plans. This science of human behaviour can help educational planners in involving individuals and groups in such a way that their energy and influence are released and enlisted in support of development plans rather than in opposition to them.

Education. We do not want to enter into the argument as to whether or not education is a discipline or a professional area. Perhaps it is both. We do want to underline the fact that involvement of specialists in a wide variety of disciplines does not take the place of the educator or educationist. There is no question about the fact that the educator must take the major responsibility for educational planning and the implementation of plans. All we are saying is that realistic planning for education demands knowledge and expertise from a wide spectrum of social and behavioural science areas, and that educators cannot be expected to possess this knowledge in comprehensive, up-to-date form, even though their own college education may have included study of

social science subjects. In addition to a possible basic grounding in the social sciences, the educator brings to educational planning a number of areas of specific knowledge and ability. From educational psychology he brings knowledge of the learning process and the relationship between learning and physical and emotional maturity. He brings knowledge of education in other countries and cultures, the strengths and weaknesses of these foreign systems and their potential contribution to the educational system of his own country. The educator should be knowledgeable about the status of education in his country, not only in terms of numbers of students and trained teachers but also in terms of the attitudes, values, philosophic outlook of the teaching profession, curriculum content, organizational operations, and the strengths and weaknesses of the system as it now operates. In addition, he brings to the process of planning the knowledge of how the plan is to be implemented at the regional, state and local levels. He can help to make sure the national plan is realistic in terms of the kinds of abilities, hindrances, resources and administrative problems that exist at the school level. He understands what is involved in achieving the kind of coordination that is required between the educational and other sectors if the plan is to be implemented, and he can fight for recognition of the place of education in the total developmental scheme.

Other Professionals. The above is only illustrative of the contributions of some of the disciplines that have a vital role to play in educational planning. Important contributions should come from a number of professional groups whose work relates directly to education, and vice versa. The improvement of the educational curriculum depends on up-to-date information on which is happening in the agricultural, public health, industrial, and other sectors of society. The expertise of social workers should be drawn on in planning those aspects of education which relate to family problems. On the other hand, the needs of these sectors for manpower trained with certain knowledge, attitudes and skills must be taken into account in laying out the plan for development of educational and training programmes.

In addition to the professionals found in the various agencies responsible for development of the several sectors of society, the contribution of professionals found in the several ministries and government agencies should be drawn on. These include such

agencies as the planning ministry or commission, the ministry of finance, the ministry of labour, the ministry of transport and communication, the ministry of defence, the ministry of scientific and cultural affairs, the public services commissions, and other agencies responsible for specific areas of development. We repeat, perhaps no other sector of development is more dependent on others than education, for education, in its content, social responsibility and administrative procedures, encompasses all aspects of society, and is related to all other aspects of development.

The Interdisciplinary Team Approach. The above discussion of the contribution of various disciplinary, professional and administrative groups is not intended to suggest that the process of planning is satisfied when someone takes the contributions of the separate groups and fits them together into a whole which shows in discreet categories the ideas that come from each group. Much more is intended. At a number of levels a team approach is intended in which scholars and professionals from many backgrounds work together in such a way that an integration, a blending of ideas, results. The educational plan, and its implementation, should have the benefit of the interchange and challenging of ideas that can come from the group involvement of experts from the several fields of knowledge related to educational planning. When the anthropologist, the political scientist, the social worker and the financial expert sit down with the educator for discussion aimed at evolving a plan for some phase of educational development, a process of involvement takes place which results in something larger than the sum of each person's contribution. In the beginning each specialist tends to see the problem from a single perspective and to propose solutions that grow out of his limited background. Through interchange among the planning team each person's ideas are challenged, tested, tempered and revised in the light of other viewpoints. This process should be viewed as a creative, inventive one, through which solutions of a much sounder, more realistic, and greater validity emerge.

This team approach also contributes to the development of the individual scholars and professionals. Not only do they become better specialists through having their ideas challenged and tested, they also become better generalists. They begin to see the relationships that exist between their area of knowledge and that of other specialists. They come to understand the implications of other

bodies of knowledge for their own field, and they come to understand how their learning and skill can be adapted to the needs of workers in other fields. Thus they become more proficient in their ability to contribute to Indian national development.

Further Implications. The team approach to educational planning and development has many implications for the implementation of development plans as well as their preparation. Although we have been talking primarily about involvement of a wide spectrum of specialists in planning, we have not intended to imply such involvement only in the creation of the *national plan.* Certainly the planning ministry or the national planning board should be made up of persons representing the several disciplines we have been discussing. Certainly the commissions, committees or other special groups set up at ,national, state and regional levels should be so constituted. In addition, there are innumerable other situations in which the team approach should be used. In-service programmes for teachers should be planned and carried out with the help of social and behavioural scientists and specialists in the various development sectors. Training colleges should draw on scholars from other disciplines, either as regular staff members or as consultants or short-term staff, and they should be involved in laying out the curriculum and the extension work of the college. In devising schemes for change in the operations of the school system, such as a plan for the reorganization and reorientation of school inspection, social and behavioural scientists and government bureaucrats should be involved on a team basis. The staff and planning groups of the State Institutes of Education should be drawn from several disciplines outside education, and specialists in public health, agriculture, public administration, government finance and other related areas should be involved in carrying out the programmes of such institutes. Certainly such an agency of national leadership in educational development as the National Council of Educational Research and Training should have on its staff persons from a wide range of scholarship related to education in its broadest sense.

Among other uses of such persons is the part they should play in designing and carrying out educational research. The pressing problems to be solved cry out for an interdisciplinary and interprofessional approach, and an institution charged with responsibility for the training of educational leaders, promoting basic and

applied research, and designing and implementing programmes of extension, cannot fully discharge its responsibility without the full and integrated application of the best that is known from the fields of cultural and social anthropology, sociology, political science, economics, social psychology, administration, social work, and special fields concerned with the process of social change.

Educational Control Critical. These are only illustrative of the situations and programmes in which the interdisciplinary-inter-professional team approach is applicable. Educational leaders should carefully consider how best to use this approach and where it should be used. In doing so, they should not lose control of the initiative. The leadership should remain with them, as does the ultimate responsibility. To be able to provide leadership and coordination of the involvement of other scholars and professionals in educational development, educational leaders should themselves be aware of the potential contributions of these fields. This means that the education and training of educational leaders should include introduction to these related bodies of knowledge and study of their relevance for educational processes. Except in the training of educational sociologists and educational psychologists (who should be increased in number), no attempt should be made to provide depth of study in these related fields. The purpose should be to orient educational leaders to the way in which other scholars and professionals can be used in carrying out a comprehensive approach to the problems of change in education. They should be equipped with the skills required to manage a team approach, including skills in group dynamics, for it will take very skilled leadership to help experts from widely varied fields to learn to work together—to learn to listen to others' points of view, to learn to understand the language of another discipline, to accept criticism of their view, to accept compromise, to want to work with other scholars, to see their own contribution in perspective, and to be willing to think through the application of theory to actual situations and problems. Without very able leadership in group methods the team approach can fail miserably. with it the team approach to planning and implementing can add desirable new dimensions to the solution of educational problems. Agents of change in education should have this ability themselves, and their responsibility should include helping other educational leaders at all levels to develop it.

Evaluation and "Feed-back"

The final generalization we will discuss has to do with what is commonly called "feed-back". There are several kinds of feed-back. One kind is illustrated when persons who have contributed to change efforts receive some direct, personal benefit from the change. Farmers who experiment with new fertilizers receive immediate feed-back in the form of more food to eat or more money from their product, if the experimentation is successful. A government worker who introduces improved office management procedures may be promoted as a result of his efforts. A teacher who puts extra effort into a successful teaching project may be rewarded through public recognition of his good work. These kinds of feed-back are very important ways of motivating those rewarded to continue innovating, and of motivating other persons to become interested in trying to improve their work. We have discussed this and other aspects of motivation in Chapter 3.

Another kind of feed-back comes from carefully planned evaluation. Although it is appropriate in one sense for us to be discussing evaluation towards the conclusion of this book, it is inappropriate in another. Evaluation is an aspect of planned change that should be built into development programmes from the very beginning. There are two reasons for this. It is impossible to evaluate a project unless the objectives are clear in terms of what the project is intended to accomplish. Planning evaluation from the beginning forces the planners to think carefully and specifically about goals. Thinking about goals helps to give the project focus and direction—to make it better planned. As has been discussed earlier, too many school improvement projects have been less than successful because those managing them were not clear about objectives. Being unclear about the objectives means that there is no definite basis for planning methods. The absence of a definite basis for deciding methods often results in uncoordinated activity that has little hope of making an impact, of bringing about hoped-for change. Evaluation carried out at intervals throughout the life of a project provides feed-back to the planners and participants which can be used to adjust methods, to alter directions and, in some cases, to alter the objectives themselves. Without periodic evaluation and feed-back a project may continue along unproductive lines, or lines that are less productive than they might be.

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The first summer institutes for secondary science and mathematics teachers were held during 1963, at each of four different locations, for teachers of physics, biology, chemistry and mathematics. The purpose of the institutes was to introduce teachers to the new methods and materials developed in the United States so that Indian teachers could use them in modifying and improving their own teaching in secondary schools. Teachers came to each of the institutes from all over India, each teacher being the only one attending from his district.

In an informal follow-up evaluation a year later, a science advisor visited many of the teachers who had participated. He found that in most cases the teachers had done very little to make use of what they had learned at the institutes. In some cases headmasters and/or inspectors opposed changes in teaching proposed by the teachers. In other cases, headmasters were sympathetic but unwilling to authorize the teacher to depart from the state syllabus. Fellow teachers, who had not attended the institutes, discouraged the teacher from introducing new methods or materials, pointed out that the new materials were too difficult or inappropriate for Indian schools. In other cases, the physics kits supplied by the institute sponsors were locked up to make sure no damage or loss would occur and they were inaccessible to the teacher. Students were not interested in the changes for which the teacher was trained because they feared they would not be prepared for the external examinations.

The results of this and other informal evaluations were fed back to the institute planners which led to a number of changes in the total programme intended to improve science teaching. The objectives of the institutes were altered to include less expectancy of immediate application by the teachers without support from authorities and other teachers. Steps were taken to introduce the new approaches to college and teacher-training students. State departments were encouraged to send representatives to the institutes, and in a few states schools were authorized to experiment with the new methods of teaching. Evaluation procedures were more definitely built into the whole programme with constant reporting back on what was found. Successful situations were written up for distribution. Textbook writing committees were formed at the national level to adapt the American materials for Indian schools.

What instances are there of innovations in Indian education which were allowed to continue for years on a wrong path because they were not evaluated? Are there other examples where evaluation and feed-back altered educational planning? Why is evaluation so infrequently built into educational projects?

Another reason for building evaluation into development projects from the beginning results from the need to make a research

approach to development change. There was a time, not too long ago, when optimists among development planners thought that the process of bringing about modernization in countries like India was fairly simple. The experience of the past twenty years in India and in other countries proves that independence provides the opportunity for development but it does not automatically produce it. Foreign advisors to India and other underdeveloped countries early conceived the task as mainly one of transplanting the "know-how" of industrialized societies into newly independent nations. We now know that this is not the case, that ideas and practices appropriate in one culture are usually not appropriate in another culture. In other words, we do not have the answers to development problems, we must systematically search for them. Mr. David Bell, former Director of the United States Agency for International Development, speaking of American overseas assistance programmes, put the problem well when he said:

It is my impression that the organizations which carry out our aid programs do not have a distinguished record of building into those programs strong elements of research and evaluation. Certainly this is true of AID, the agency I know best.

This is unfortunate on at least two counts. First, foreign assistance is a relatively new activity and plainly we have an enormous amount to learn about how to conduct it effectively. We have lost much valuable time and have failed to learn from much valuable experience, because we have not adequate research and evaluation programs. Second, the process of foreign assistance is inherently dependent on research. It is often described as a method of transferring know-how, but this is plainly wrong: it is instead a process of developing know-how—a process of finding out what will work in Nigeria, not of transferring what has been found to work in Nebraska. If we understood our own business better, it might well be that the whole process of foreign aid would be seen as a research process, aimed at learning how to move a particular society, with its special and unique characteristics of history and culture and physical geography, toward specified objectives.

What Mr. Bell said about American technical assistance pro-

grammes is applicable to a country's own internal development programmes and projects. Where assistance is sought from another country the research and evaluation approach should be carried out through intercultural cooperation, thus merging the interests of the foreign advisors in seeking new answers to development with the similar interests of local scholars and professionals. What is learned from evaluation and research can feed back to development planners and administrators who in turn use the information in planning new phases of evaluation and research; thus the process is cyclical.

Evaluation as discussed here is obviously for the purpose of improving programme operations rather than for the purpose of punishing or rewarding persons or agencies. As such, it should be carried out by the staff of each project and programme. This is what is meant by building evaluation research into the project itself. To accomplish this with a measure of efficiency and reliability may require assigning a person with special training in evaluation to work as a member of the staff of the project. Such a specialist would work with the staff in evaluating their programmes and he would operate in such a way that he is not seen as a threat to other members of the staff. He should work under the supervision of the director of the project the same as any staff member. He should be used as a service agent, helping to plan objectives, developing an evaluation design, advising on means of evaluating different kinds of objectives, devising means of gathering data, assisting in the gathering of data, and working with the total staff on interpreting the data and relating the findings to future planning.

In some cases it may be necessary to ask an outside person or group to evaluate a programme. Where this is necessary, in order to maximize feed-back to the operating staff, it is desirable for the evaluators to work closely with the staff, using as much staff self-evaluation as possible, and certainly involving the staff in interpreting the results and relating them to replanning.

A word of caution is desirable at this point. Developments of recent years make it possible to evaluate more kinds of outcomes than was previously possible. To apply all that is known about evaluation often requires a highly skilled staff and very elaborate and time-consuming processes. Also, certain kinds of changes are more difficult to evaluate than others. Generally, *quantitative*

results are easier to measure than qualitative results. For instance, it is easier to evaluate the success of a literacy programme in terms of the number of people who can read and write than in terms of improvements in the quality of living resulting from literacy. It is easier to evaluate the increase in number of projects launched by a given agency in a community than it is to evaluate the worthwhileness of those projects in improving the community. It is easier to evaluate in terms of the number of teachers participating in in-service programmes than in terms of *how much* each of them benefits from participation. It is difficult to evaluate changes in values, attitudes, motivation and change-proneness. Yet these kinds of changes are among the most important if improvement projects are to contribute to long-range progress. The point to keep in mind is that evaluation can be a complicated business and there should be correlation between the degree of sophistication attempted in evaluating and the availability of trained experts to supervise the evaluation process.

On the other hand, simple evaluation can be planned and carried out by the staff of a project without getting involved in complicated processes. Every staff should be clear what the goals of the project are, and these can be put on paper. In doing so it is important to focus on behavioural changes, changes that can be observed and measured. Such questions as these are helpful in refining objectives: Exactly what are teachers expected *to do* differently as a result of the in-service project? What should students who have experienced the new method of teaching be expected to know or what skills should they be able to demonstrate? The answers to such questions should be followed by these: How can we tell if the project has had an impact? What information should be gathered to find out the success or failure of the project? What criteria will be used in analyzing the data? What measures will be applied: how much change indicates success? How will the outcome of collecting, analyzing and evaluating information be fed back to the planners, administrators and supervisors, so that improvements will result? These are some of the questions concerning evaluation which should be carefully thought through in planning any project or programme for the improvement of education.

We cannot emphasize too much that (7) *Evaluation as an integral part of development projects, and feed-back of results in*

*a sequential cycle provides support for continuity in the pursuit
of development objectives.* Without such evaluation, projects may
lose their momentum for lack of relevance to the solution of pro-
blems, or they may continue for years with artificial supports and
never achieve the objectives for which they were planned. The
latter seems to have been true of many aspects of the secondary
extension programme which was begun in 1954, partially assessed
in 1959, but not fully evaluated until 1964-65. Many of the
weaknesses found after ten years of operation could have been
corrected earlier if more thorough evaluation had been built in
from the beginning. There was too great an assumption, based on
the experience of in-service training programmes in the United
States, largely, that certain types of activities would yield results.
We now know that what was assumed was only partially true,
and that a questioning, seeking, evaluating approach from the
beginning would have led to earlier emphasis on better planning,
greater coordination with sources of administrative control over
the schools, less reliance on imported ideas and programmes,
more cooperation among schools, greater recognition of the social
and psychological factors involved in changing teachers and
school administrators, more involvement of the knowledge of so-
cial and behavioural scientists, and other emphasis on process
problems.

RECOMMENDATIONS

The following recommendations will summarize the main ideas
in this chapter and supplement previous suggestions for action:

Improve Leadership for Change

1. Steps should be taken to encourage more persons of out-
standing native ability and appropriate leadership qualities to
go in for educational leadership. Educational development in India
requires the highest talent among the populace; it also requires
leaders with personal qualities in keeping with democratic rather
than authoritarian methods of working with people.

From among those already in the education cadres, promotion
to positions of administration and leadership should be based on
leadership qualities and performance, rather than on seniority
alone. It should be possible for younger people of outstanding

ability to find their way to the top in a shorter period of time than is now usual.

2. New agencies and programmes of leadership training should be established, for national, state and local levels. The leadership training function of the National Institute of Education should be fully developed and carefully selected persons should be aided in attending from all over the country. The suggested National Staff College for Educational Administrators is another possible partial answer. Other agencies and programmes will be needed to provide basic training for administrators and supervisors and periodic refresher courses, seminars and workshops focused on specific problems. Of more importance than the form of the training agencies is the nature of the programmes they offer. The curricula of these programmes should emphasize the development goals of the country, the rôle of education in achieving these goals, and the processes of planned change that promise success. The latter should include careful analysis of traditional decision-making procedures, modern political processes, and the way in which these can be accommodated, used and modified to ensure effective educational leadership.

Use and Reform Established Channels and Procedures

3. To the extent possible, keeping in mind change goals, new programmes should be introduced through established agencies such as the State Departments of Education, the school inspectorate and the training colleges. Where new agencies are needed, they should be established with the close cooperation of established agencies. As these established agencies are involved, they should be encouraged and assisted in modifying their purposes and procedures in keeping with the goals of educational reform.

4. Research and experimentation should be initiated on a large and coordinated scale on the problems of educational administration and leadership. Among the priority problem areas that should be investigated are the delegation of authority, staffing at the district level, the nature of the inspector's job, the administrative procedures of the State Departments, personnel practices, decision-making and implementation, the relationship between administration and supervision, the leadership role of headmasters, and the characteristics of effective administration and leadership.

Increase and Improve Communication

5. Through national and inter-state efforts, state educational administrators should be helped to learn from each other. It should not be necessary for each state to carry out its own comprehensive programme of research and experimentation: what is learned in one state is likely to be applicable in another. New emphasis in the programme of the National Institute of Education on working with the State Departments of Education should include the establishment of techniques and procedures for interstate communication.

6. The importance of vertical and horizontal communication should be emphasized in training programmes for administrators and supervisors. The State Institutes of Education can and should make a concrete contribution to improved communication through the example they set in their work as well as in their training programmes.

7. National leadership institutions such as the National Institute of Education should systematically experiment with different communication techniques within the organization as well as with other agencies. It is particularly important to demonstrate what can be done to stimulate communication upwards through the hierarchy so that leaders have the benefit of ideas from workers.

8. Organizations like the Department of Field Services of the NIE to spread information widely about improved school practices should be encouraged and set up by State Departments of Education. Radio and television (when it becomes widely available) should be used to supplement the printed word and meetings of various kinds.

Plan from the Bottom up

9. In planning for state or national development, or for the promotion of a general scheme to improve some aspect of education, the plan should be based on the *detailed planning of projects at the school and district levels.* In most cases it should be possible to try out projects experimentally before attempting to generalize them throughout a *state or the nation.*

10. When, on the basis of local project planning and try-out, it is known what resources, knowledge and abilities are necessary for the success of projects, choices should be made in state and national planning in terms of what it is possible to do. This

will result in concentration on a smaller number of development programmes which it is possible to implement, or to concentrate on more general development in limited geographic areas. To spread limited resources thinly results in little implementation and enormous wastage of time and effort, as well as of resources.

11. Some such organization as the National Council for Educational Research and Training or the University Grants Commission should take responsibility for establishing a centre or programme for advanced study of educational planning and finance. Such an agency or programme should give assistance to the states in evolving improved procedures for educational planning.

12. State and national agencies charged with in-service training and the promotion of school improvement activities should give priority to training school personnel in planning. This training should be carried out through actual work in planning projects which are to be carried out by participating schools. These planned projects should be followed through by local education officers and training colleges, and the results reported to state officials.

Involve Other Disciplines and Professions

13. At national, state and local levels, educational planners and leaders should arrange for the participation of persons from the academic disciplines of colleges and universities, from related professional groups, and from government agencies concerned with other aspects of development. This broadening of participation is appropriate in planning for education and in the implementations of plans. Participation of persons outside education should not be on an incidental basis, but rather as part of a team approach which invites interaction among the several disciplines and professions in dealing with educational problems.

14. The staffs of agencies charged with educational leadership should include scholars from the social and behavioural sciences, thus complementing the contribution of educators in a multi-faceted, comprehensive and coordinated approach to educational research and development. Educational change is a social process which demands knowledge and insight beyond what can be expected from educators: interdisciplinary and interprofessional team-work is necessary to give balanced and integrated attention to all the facets and factors involved in change in educational institutions and programmes.

15. The training of educational leaders should include the build-
ing of understanding of the contributions of other disciplines
and professions, and knowledge and skill in making use of
scholars, professionals and government officers from other sectors.

Plan, Implement, Evaluate, Replan

16. In the planning of every development project or scheme,
evaluation should be provided for, and flexibility allowed
so that the results of evaluation can be fed back for replanning
and redirecting the project or scheme. Evaluation planning should
include careful consideration and delineation of objectives, and
the careful anticipation of how evidence is to be collected, how
it is to be processed, how it is to be evaluated, and what skilled
manpower is required.

17. All programmes for the training of educational leadership
should include the imparting of knowledge and understand-
ing of the role of evaluation in development programmes, and the
development of abilities required to make use of evaluation and
feed-back as important supports for development programmes.

18. Careful plans should be made for the education and training
of programme evaluation experts in sufficient quantity to serve
development needs at the national, state and local levels. A sufficient
number of persons in national agencies should be given high-level
training, so that they in turn can organize training programmes for
selected state and district officers. State Institutes of Education,
Regional Colleges of Education, universities, and district education
offices should have staff members skilled in programme evaluation
who work with the staff of every school improvement project to
help incorporate evaluation and feedback processes.

SELECTED READINGS

1. Aiyappan, 1965, chap. 3.
2. Barnett, 1953, chaps. 4, 5 and 6
3. Benne & Muntyan, 1951, Part 3, section C.
4. Culbertson, 1963, chaps. 4 and 5.
5. Goodenough, 1963, chap. 16.
6. Johns, 1963, chap. 2.
7. Lionberger, 1960, chaps. 4 and 6.
8. Mann & Neff, 1961, pp. 25-52.
9. Miller, 1967, chaps 4 and 6
10. Rogers, 1962, chaps. 7 and 8.
11. Watson, 1967 (a), chaps. 4 and 7.

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The Agent of
Change in Education

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Introduction

In this book we have not dealt with the contributions of educa-
tion to development, although we have discussed educational
change in the context of accelerated development. Likewise, we
have not dealt particularly with the content, character or teaching
methods of the school, college or university, although what we
have tried to say about ways of working to improve education
should affect the nature of educational programmes. Others have
written about the rôle of education in a developing society, and
fortunately that rôle is increasingly recognized as being central
to progress towards goals for a richer life for all countries and
societies. Many others have written thoughtfully about the kind
of education India needs to satisfy the aspirations of a newly
independent country faced with problems that stagger the
imagination.

Rather, we have dealt with the processes of change within
education itself, and especially with what we feel are ways of
improving those processes. We have written out of deep concern
over the fact that many persons have contributed promising ideas
as to what Indian education should be, many schemes have been
devised for revolutionizing one or more aspects of education,
many experiences from other countries have been imported, and
these many ideas, schemes and experiences from abroad have
made little impact on the character or quality of what is taught
in the classroom. The ills of education are common knowledge;
what should be done to correct them is also known. What is not

known is how to bring about the needed changes—how to proceed so that what is now being done will be altered for the better, how to change the actual behaviour of those who manage the educational enterprise, how to change the expectations of the élite public which determine in large part what the teachers and administrators of schools do, how to mobilize and organize the efforts of persons at all levels interested in improving education so that actual and lasting change takes place, and continues to take place in desired directions.

These are not easy questions to answer, and obviously we have provided no panaceas. However, we hope we have added something important in our focus on process—process of planned change. In so doing we have drawn heavily on social and behavioural scientists and professionals from many countries. We have also drawn on the thoughtful analysis of experience of many persons who have applied their professional acumen to development programmes. We have drawn on available research on how planned change takes place, too much of it done in fields other than India. Our bibliography reflects our diverse sources. We have drawn on our own limited experience—much of it in education and in India. From available research and the writings of scholars and professionals interested in development, and out of our experience, we have drawn generalizations which we believe help to point the way to improve processes of change in Indian education. Many readers will differ with our generalizations; some will conclude that we have reached conclusions from too little experience and research, or that we have misinterpreted the research and writings of others; others will conclude that our generalizations may be applicable to other situations but not to their; some will feel that our generalizations are only untested hypotheses. As we said at the conclusion of Chapter 1, we did not intend laying down principles or laws which should be followed unquestioningly. This is seldom possible in dealing with human affairs. We intended to generalize in ways that will stimulate new thinking, that will bring to the planning of educational reform certain ideas on process which may have been inadequately considered before, and which will emphasize the need to initiate programmes of research and experimentation aimed at finding out what ways of working actually do produce desired change in the many varied situations facing Indian educators at all levels. In

doing so, we have had in mind agents of change in education, and all those teachers, school administrators, education officials and educational leaders whose work might profitably be reoriented in ways more productive of beneficial change.

THE AGENT OF CHANGE

Definition

Who are agents of change in education? In this chapter we will deal specifically with them—the concept of their job, the goals of their work, the various rôles they play, how they should approach these rôles, and how agents of change should be trained.

The concept of change agentry is not entirely new, although the professional rôle has emerged recently. Every culture has had saints, revolutionaries, and public men of vision who worked for reform and advancement in their society. India has a rich tradition of agents of change of all shades and kinds. Some saints such as Tukaram in Maharashtra, Tyagaraja in Tamilnad, and Bharati in Karnatak have been soft-spoken but persuasive agents who commanded considerable influence among their people. On the other hand persons such as Kabir have been more outspoken, scathingly criticizing the prevalent order of authority, mocking common practices, and yet being listened to and making an impact. One could also mention many teachers from several periods of Indian history who have worked effectively for change. In the present century, perhaps, Mahatma Gandhi was the most effective change agent and it would be interesting to analyze his methods of work in relationship to the generalizations we have discussed herein.

Since World War II, however, the agent of change has emerged as a professional person whose tasks are those of helping communities and groups to plan out development or reform objectives, to focus on problem situations, to seek possible solutions, to arrange for assistance, to plan action intended to improve situations, to overcome difficulties in the way of productive action, and to evaluate the results of planned effort. To perform these tasks successfully, the agent of change requires certain personal qualities, certain knowledge and understanding, and certain skills. He needs to have an understanding of human dynamics of evolutionary development, and a philosophically sound concept of his

job in working with them. Most of all, he must understand that his responsibility is to help others learn to help themselves.

Much of what has been written about the agent of change has been concerned with the professional or academic person from one of the more advanced countries who spends relatively short periods of time working in an underdeveloped country. In more recent years the Peace Corps Volunteer and similar less sophisticated agents of change have entered the picture. Such persons face serious problems of cross-cultural communication, empathy and acceptance. All too often they return home before they have come to understand the local culture in depth and before they have become thoroughly accepted. They are treated as guests more often than as co-workers, and the great hospitality of many traditional cultures and the formal procedures that go with entertaining a foreign guest, however much they may be appreciated, often get in the way of professional work. On the other hand, the agent of change from another culture has some advantages over the agent who works among his own people. He is often more readily respected and listened to. What he says carries greater weight because he has the relatively greater success of his country behind him. In most cases his assignment entails very little administrative responsibility and he is free to discuss, think, plan and move about among client groups.

There are undoubtedly more similarities than differences between a foreign and a local agent of change, and we can benefit herein from the research into and the experience of cross-cultural change agents. In fact, most indigenous change agents are also required to work cross-culturally. A person born and raised in an urban setting is working across cultural differences when he works with rural persons, or villagers. The reverse is also true. An educated person has to recognize the cultural barriers in working with uneducated groups. Persons from one religious, tribal or caste group face similar problems in working with persons from another group. This is a problem in India, as is cooperative work among persons from different parts of the country. In a real sense, an agent of change must be sensitive to the differences in outlook between himself and his clients regardless of the cultural reasons for those differences. This is why empathy is such an important characteristic of a successful change agent. More follow in this particular quality.

There are few agents of change in Indian education, in the pure sense. Few positions have been established for this purpose and few persons in other kinds of positions find themselves able to perform the change agentry role. The coordinators of extension centres, the staff of the State Institutes of Education, and the staff of certain other state and central government agencies may be viewed as change agents. The university professor who is invited to work with a particular school improvement project may behave as an agent of change while he is serving as a resource person or consultant. For the most part, recognition of this rôle has not yet been fully accepted among Indian educators and this may be one of the major reasons for slow progress in reforming education. Careful studies should be made as to the number, kind and placement of change agents for more effective progress.

It is interesting to note that while this is being written the country from which India may have learned most about change-related concepts in education—supervision, curriculum development, group dynamics, democratic administration and in-service training—is itself seriously re-examining the place of change agents in education. In the United States, education is currently undergoing extensive reform, and the means of accelerating and guiding that reform are under intense rethinking. Social and behavioural scientists are becoming interested in educational processes more than at any period in American history, and, with their assistance are evolving strategies of educational experimentation and change. In addition, programmes of massive assistance from the Federal Government help to make mutual cooperation most effective. In this period, the staffing of schools and school districts is being re-examined. The school principalship is being studied as one position which might be used for more effective change influence. Curriculum development procedures are under experimentation and the function of supervision is being given new dimensions. Research and development centres and laboratories are being established on regional bases. In these centres and laboratories newer technologies are employed such as educational television, teaching machines, programmed instruction devices, computers, and models. Along with these new developments, new change rôles are emerging. These include such roles as: operations research analyst, innovation designer, dissemination specialist, demonstrator of innovations, inquiry consultant, facilitator of

diffusion, systems linker, scientist-trainer, and technical writer. Systematic research is gaining a new place in the total sequence for finding solutions to educational problems, and research workers of many kinds are coming to grips with educational data.

We do not mean to suggest that the new change agent rôles emerging in the United States should be transferred to India. Developments there and in other countries should be watched carefully, however, and systematic thought should be given to how they may apply to the Indian situation. The new agencies being established may be of particular significance in demonstrating how much and what kinds of organized effort is needed to bring about meaningful reform. It will be many years before the new technology of education can broadly be applied in developing countries, but it might be sound to set up a few experimental centres which can carry on limited activities aimed at testing the applicability of these new devices and procedures. Other aspects of new developments abroad may be more readily applied such as team teaching, the use of teacher assistants, the grouping of students by ability, and the ungraded school.

Goals of the Change Agent

It should be clear by now that the goal of the change agent is to bring about change in his clients, individually and organizationally. This means that his interest in people should be primary, and his interest in particular programmes, projects, schemes, or changes in the school system should be secondary. He may promote worthwhile innovations for their own sake, but his focus should be on using them to develop in the client system certain characteristics that will enable it to become innovating in its own right, with a minimum of outside prompting and assistance. In fact, progress towards this goal is often achieved through projects that fail, or are only partially successful. This can be true if the methods used by the agent of change are in keeping with the generalizations discussed in the preceeding chapters. If the clients are deeply, sensitively and intelligently involved in an experiment they will learn from failure and as a result be that much further along in ability to manage their own affairs, to help themselves. This is the change agent's goal.

Innovative Characteristics. One aspect of the goal is to develop in clients what may be called change-proneness. A person who is

change prone is inquisitive, anxious to improve, experimental in outlook, positively critical of himself, cooperative with others in discussing problems, professionally alert. In short, he is dissatisfied with the status quo, believes that it can be improved, is willing to put out the effort to try new ways, open to new ideas, and interested in working with others to bring improvements. The development of these and similar characteristics is the aim of change agents. They can be developed in individuals and groups by change agents who patiently work with them; they can seldom be developed by the dictates of authority. Our earlier discussion of motivation, cultural relevance, and dynamic factors bear on this goal.

Skills and Abilities. Successful change requires more than interest in and tendencies towards progress. It requires certain skills and abilities which must be developed through experience. Another category of goals for the change agent is to develop among his clients those skills and abilities involved in problem identification, planning, group discussion, leadership, cooperation, locating resources, listening to others, coordinating, evaluating, replanning, compromising, following, and presenting ideas to associates. Other, more sensitive, abilities are needed such as ability to take criticism, to admit error, to be self-critical, to suspend judgement, to ask for assistance, to take initiative, to make choices between alternatives, to contribute to group morale, to make and carry out decisions, and to work harmoniously with difficult individuals.

Specific skills relate to the profession of teaching, such as the ability to organize ideas and information and to present them in understandable fashion, to deal with the tools and techniques of testing and evaluation, to operate, maintain and repair audio-visual and other teaching equipment, to prepare and try-out teaching materials or laboratory equipment, to use discussion methods with large classes, to encourage students' participation without losing disciplinary control, and to use educational literature. Many innovating programmes have failed because clients have not possessed the skills and abilities needed, or because they have not been given assistance in learning them. The agent of change should accept responsibility for helping to develop both the general skills needed and the specific, technical skills and abilities related to particular innovations. Having such skills will give

clients more confidence in trying new ideas and methods, and it will make it easier to test the applicability of innovations—success or failure can be judged on merit rather than on degree of participants' skills.

Client Independence. One easy snare for a change agent is to let the client system become dependent on him. This danger is great because a dependent relationship gives easy satisfaction to the change agent's need for status and recognition. This may be particularly true in Indian culture where both dependence and status are highly valued. However, an important goal is to develop independence from the change agent. Particularly in education, workers at no level can do constructive work if they depend on other people to "spoon feed" them. They must develop a sense of independence and ability to "stand on their own feet". This is even more true in carrying on the continuing process of change and innovation than in carrying out routine duties. The agent must work in such a way that he provides the minimum assistance, makes the minimum decisions, and provides the minimum rewards to assure successful experimentation. Whatever is needed to assure success should, as much as possible, be supplied from the social system itself, and what cannot be supplied initially should be developed. This relates to skills and abilities discussed above, to motivation and change orientation, to materials and equipment, to intergroup leadership and support rôles, and to supporting changes in goals, attitudes and values.

The final test of the agent's success is the "weaning" of individuals, groups or systems from reliance on him, so that they can continue to use and mature an innovation on their own. This makes it possible for the change agent to move on to other innovations, to other groups, or to other programmes requiring his attention.

The Change Agent and Authority

The proper balance between authority and volition is a problem in any society; it is especially knotty in a traditional culture which is moving in the direction of democracy. Change agents who have no authority may feel frustrated in the absence of this traditional force through which to get things done. He may feel that there is no way of getting things started without authority, or he may find that his efforts are not respected unless they are sponsored by

government officials. He may feel that people are taking advantage of his weak position. At moments of insecurity he himself may fall back on the assuring support of authority. On the other hand, he may find that teachers or school headmasters who take up improvement programmes because they have been promoted through authoritative channels do not take them up with sincerity or understanding, and in time the new programmes wither or continue to exist in form only.

Each agent will have to work out the best compromise possible without violating the principles of change we have reiterated herein. Among those principles is the strong endorsement for working through established offices and channels. This complicates the problem, for it is difficult to work through known officials without their authority automatically coming into the picture. Perhaps the change agent should assume the major task of gradually developing among officials and clients a recognition that too much reliance on authority is a hindrance instead of help—that authority should be used judiciously. At the same time he should work to establish the authority of new traditions, traditions that will give prestige to methods that are successful because they involve the clients and serve their needs. This amounts to developing a new rôle for educational leadership, a rôle that works through explanation, consultation, persuasion, demonstration, experimentation and try-out, group decision-making, client involvement and inner motivation, rather than authority. The agent who can establish this new rôle for himself will be successful. The one that relies on authority alone, or as a major force, is likely to fall into old patterns and to find himself going through motions but accomplishing little.

The Functions of the Change Agent

To achieve his goals the agent of change performs certain functions, or rôles. One function he plays is that of a professional specialist on one or more aspects of education. He may be an expert in science teaching, or in group dynamics, or in the use of audio-visual aids. Another function he may perform is in giving assistance on special school improvement projects or programmes. He may help to organize a seminar or workshop, or he may help in planning a total long-range programme of improvement of one

part of the educational programme. He may also initiate certain projects or activities. Still another rôle or function is that of catalytic agent—he helps to bring together a person or group with a need and a source of satisfaction of that need. Another rôle is that of system and organization builder. He helps to bring about the conditions necessary for the social system to carry on its own improvement programmes through its own efforts. And finally the change agent must be an innovator himself, inventing ways of solving problems and meeting needs for which there is no known solution. This is the ultimate challenge to creativity and imagination.

Providing Professional Guidance

The agent of change in education should be a generalist in education, not attempting to provide answers on all problems but having a broad interest in and understanding of educational programmes, their purposes and operations. In addition, he should be a specialist in one or more areas. The reason is not only that he should be able to give concrete assistance, advice or guidance to teachers or administrators seeking help, important as these functions may be. A more important reason is that his professional expertise gives him an entrée, a reason for getting involved, a freedom of access to a group or school. It may be difficult because of pride or "face" for a teacher, principal or group of school administrators to invite an agent of change to help them to alter their ways generally. It is easier for them to ask for specific professional or technical help on the teaching or reading, on the use of accumulative records or on the use of rôle-playing in teaching. The reverse situation is also true; the agent of change who volunteers his assistance on some one problem area is more likely to be received than if he offers his services to bring about general change, which implies personal change on the part of the individual or group. It is easier for people to admit the need for specific help than to admit the need for a general reorientation to life and work.

In addition, the professional leader who can give concrete assistance in specific problems gains the respect of workers, and he can build a broader rôle on this base of respect and acceptance. He can move from being an accepted expert on English teaching to being an agent of change.

He can make this change advantageously, but a caution is in order. He may find it so satisfying to play the rôle of professional advisor in his field of specialization that he hesitates to venture beyond it. He may like the expressions of gratitude and the feeling of success that come from performing a specific service to a school or group of educators, and he may retreat to this rôle when he runs into the more complicated difficulties of change agentry. There are many examples of secondary extension coordinators who have found a comfortable rôle for themselves in helping schools to run science clubs, in establishing libraries, or in starting career corners in schools, and who have not gone beyond to become agents of change in the larger sense. In such cases their service is a limited one, even though it is of high quality, and little contribution may be made to institutionalizing processes of continuing change.

It is easy to fall into this trap because it may be satisfying to the agent of change, but also because the clients come to see their rôle as a limited one. If they recognize the agent only as a specialist in one area they may invite his help in this area and reject it in others. For this reason, although the professional expertise of the agent should be used, he should very early take steps to broaden his role and not get "caught in a rut". It will help in making the transition if the agent trains other persons in the system or organization to replace him as the expert, or if he puts the schools in touch with other persons—inspectors, training college staff, headmasters or others—who can play the rôle of experts on a continuing basis. By all means the agent of change should not let himself be satisfied with the rôle of professional advisor except as a strategic step in a calculated plan of larger dimensions.

Promoting Improvement Programmes

A second function the change agent should play has to do with promoting and initiating school improvement programmes. Keeping in mind factors of readiness, he may seldom initiate a programme unless he is very confident that the situation is ripe for it. In most cases he will respond to initiatives among the client group and will assist them in putting their ideas into an overall plan of action. It should be kept in mind here that we are talking about a "programme" in the sense of a long-range, carefully

detailed, sequential plan intended to bring about one or more changes over a period of time. Here is a situation in which an agent of change can make a very significant contribution. A large percentage of efforts to improve education fall by the wayside because they are poorly planned, because those in charge do not take into account all of the factors that must be anticipated if success is to be achieved. We do not want to repeat all these factors here—this whole book has dealt with them—but only to mention such things as readiness and motivation, proper timing, coordination of effort, the role of values, proper phasing, participant involvement in planning, adequate leadership, group support, adequate resources, and evaluation procedures.

One critical step on which help is usually needed has to do with the setting of realistic objectives. An individual or group planning for innovation must be very clear about what they want to accomplish and sure that their objectives are realizable. Unclear and unrealistic objectives are the cause of failure in many school improvement projects. The objectives must be stated specifically for each step in the plan and the ways of accomplishing these objectives must be understood.

Once a programme is launched the agent of change can help to keep it going, always keeping in mind his task of building the social system into a self-sustaining innovative system as well as the task of making the individual programme successful.

Performing a Catalytic Function

A catalytic agent is one who brings two or more things together so that they interact with each other without the agent getting involved. There are many needs for this function in school improvement efforts. A teacher is in need of books which can be found in the training college library. Two headmasters are trying to introduce similar innovations in their school and they could learn from each other. An inspector is planning a series of workshops and he needs the help of several specialists found in the university. A teacher wants to provide community experiences for her students which require the cooperation of government and private agencies in the community. Schools in a district have a serious problem which could be relieved by an alteration in the regulations enforced by state officials. In these and many similar situations the agent of change can bring the resources and the

problem or need together and thus contribute to progress.

The change agent can go further. He can assist in establishing continuing relationships between and among the different systems, agencies, organizations and other elements of society which can benefit from cooperation. In the previous chapter we talked about the interdisciplinary-interprofessional approach to educational planning and the implementation of plans. This is one example of the continuing cooperation that is needed to make fuller use of the resources needed for educational progress.

The ultimate purpose of the catalytic function is to build communications among groups and up and down the ladder of the hierarchy so that the need for a catalytic agent is minimized, and resources come together without the aid of an outside agent. To accomplish this may require building additional mechanisms and procedures which do not now exist. That takes us to another function of the change agent, that of developing the client system.

Developing the Client System

Let us assume the schools belonging to an education society as a client system and the head of the society as the change agent. This particular society has been running schools for many decades without much change. The schools are known to be good schools, but not outstanding ones. The society has certain standards of their own and they attempt to meet the state standards. The head of the society chooses the best people for headmasters, and periodically the headmasters are called together to report on their schools or to listen to some educational leader or dignitary. This education society and its schools constitute a dependable and stable social system, but one which is not changing to keep up with the times and the new needs of their community.

The head of the society attended a conference where he became aware that his schools were in many ways falling behind. He made the acquaintance of an extension coordinator who, over a period of time, reported to him that other schools were progressing in ways that were unknown in his schools. The head became interested in bringing about certain improvements and breathing life into its crusty school system. With the help of the coordinator a plan was developed to change the society schools into a more alert, progressive, experimenting and innovating system. To accomplish this a number of things were done. Selected headmasters

were put in touch with known leader school outside the society, some of them government schools and some other private schools. These headmasters were asked to report some of the new things they learned and to take responsibility for introducing some of them in their own and other schools. Gradually some of these headmasters were built into educational leaders.

Teachers who wanted to try new practices or to bring about improvements in present practices were encouraged and assisted to do so. Teachers with particular talents were asked to provide demonstrations for other teachers. A newsletter among the schools was initiated, and more frequent meetings were held among headmasters and teachers; these meetings were focused on school improvement programmes. The head of the society had a particular flair for human relations, and he made use of this flair in building morale, and in building friendly relationships among teachers and administrators. He made it possible for teachers to get additional training so they could perform functions needed among the schools. He rewarded persons who did outstanding work but tried never to punish or criticize publicly any of the less active personnel.

The head of the society and the coordinator worked closely together in all of these matters, and the coordinator was particularly concerned with the need to build the talents and confidence of the head so that this education society would become independent. It soon became obvious to both that there was a need for a new permanent stimulating-supervisory-coordinating role which the society head was filling but which he could not continue to fill. He consulted the board of trustees for more money, created a new position and elevated one of the better headmasters to the new position.

In this and other ways the head of the society and the coordinator made considerable progress in building a system which was self-critical, experimental, innovative, and improving. This is an example of some of the ways in which a change agent can build an organization into an active one which can pursue its own goals of improvement on a reasonably independent basis.

Inventing Solutions to Problems

Perhaps the greatest challenge to the agent of change is that of innovating—of finding new answers to problems. The extension

coordinator who improvises science teaching equipment out of inexpensive materials found in any neighbourhood is an innovator. The inspector who figures out a way of simplifying the headmaster's administrative tasks so the headmaster has time to assist his teachers in an experiment, is an innovator. The training college principal who organizes an informal planning committee of headmasters as a way of bypassing the senile, arbitrary but beloved head of the education society which sponsors the college, is an innovator. The need for innovation at the local level is lessened where the change agent is in touch with one or more knowledge centres such as a university, or state or national agencies charged with the creation and diffusion of the results of research and experimentation. In the Indian situation, however, these sources of new ideas are still in their infancy and the field agent of change will continue to be an important source of creative problem-solving. He should not only innovate to find better answers to problems in schools and colleges, he should also invent improved ways of carrying on his own work. One example is the coordinator who developed a simple, standard outline for describing any teaching practice, and every time he talked to a teacher who was doing something unusual and interesting he asked the teacher to take five minutes to fill out the outline. In this way he easily collected a number of new ideas for teaching which he organized topically and reproduced for use in workshops and for distribution generally.

RELATED ROLES

The above describes the major roles or functions of the change agent. There are two other related functions that most change agents must perform concomitantly with the above functions if they are to be successful. The first one is to carry on a constant study of the client system—of the people, areas, institutions and agencies which make up the totality with which the agent works. The second is that of ably maintaining his own office, administering his supporting staff of clerks, technicians and junior professionals, and planning his own work.

Continuing Study of Community
There are students of change who insist that no change agent

should attempt to give any service until he has come to know his community thoroughly from all angles—sources of income, cultural groups, percentage of children in school, power structure, political make-up, value priorities, holidays and festivals, group and individual relationships, leadership patterns, etc. This approach is probably more valid from an agent of change who comes from a totally alien culture or who is not familiar with living patterns in the area he is to serve. Although many change agents in Indian education will come from outside the immediate community, most of them will not be totally new to the culture and life of their clients. This makes it unnecessary to spend a long period of time studying the community. The main thing is to gain acceptance so that work can begin, even on a small basis, and on request from a respected person in the community. Once the work has begun, study of the community can and should continue. Above everything else, an agent of change should be a good listener. If he is new in the area he will find, after the initial period of getting acquainted, that many people will want to talk to him. Some will be sounding him out to find out just what it is he intends to do. Others will try to win him to their side in local controversies. Others will try to convince him that nothing constructive can be done to bring improvement. The change agent should listen carefully to all, committing himself to nothing, and he should seek discussion with others in the community who may be able to give him a more balanced view of things, going first to officials in the descending hierarchical order.

The change agent would do well to study methods of anthropologists and sociologists in studying his client group and their community. The basic method is that of direct observation and the taking of notes that can be transcribed and organized back in the office. On some occasions it will cause suspicion to take notes while talking with, listening to or observing people; in such cases the notes can be written down immediately afterwards. Other techniques and sources include structured and unstructured interviews, census reports, government reports on education, socio-economic inventories, sociometric devices and questionnaires. Whatever sources and techniques are used, the basic need is to be constantly aware of the flow of life, making mental note of every detail that might later help to achieve an understanding to the people—their motives, values, traditions, relationships, jealousies,

loyalties, and a host of other characteristics that are keys to behaviour.

Efficient Planning and Administration

The second related function is that of efficient planning and administration of his own office and staff. Many change agents will have an office and a supporting staff. If the agent is committed to a change responsibility along with his official responsibility as an inspector, headmaster, research director, examination specialist, director of public instruction, or any one of many other education positions, he will have other duties to manage. How well office management, and the other duties are administered will determine the effectiveness of his rôle as change agent. Above all, careful planning will be needed. The change agent should keep a calendar of his commitments. He should lay out his responsibilities over a several-week period in advance. He should allow ample time between activities or programmes so that reports can be written, correspondence taken care of, and evaluation completed. He should learn to budget his time carefully and he should require the same of his staff. He should keep appointments on schedule, paying due attention to social amenities but not letting them take control of his schedule.

The change agent should also keep a written account of his accomplishments, including evaluative comments, special points to remember, names of people who contributed substantially, and any new ideas that come to his attention. Together with copies of the programme, participants names, materials distributed and pertinent correspondence, he should make up a file which he and others can refer to at later dates.

We shall not attempt here to detail all the aspects of good management and planning that are involved. They will vary from position to position, from situation to situation. We want only to illustrate some of the elements and to point out the importance of efficient planning and administration in the overall scheme of responsibilities of change agents.

THE SELECTION AND TRAINING OF AGENTS OF CHANGE

The performance of change-agent functions requires certain personal and professional qualities and skills. The basic characteris-

tics required are usually pretty well set in adults, and persons who do not possess them cannot easily be re-educated or trained. Other persons may possess the basic personal qualities and professional abilities but need to be moulded and developed in certain directions; such persons may respond to further education and training and become effective change agents. Still other persons may require only a certain amount of orientation and skill training. In selecting persons for this rôle,.and in planning training programmes, it is important to keep in mind the qualities and abilities needed.

Basic Personality and Values

To begin with, it is important to consider basic motivations and needs. They will determine to a major extent how a person approaches a job and responds to situations that may develop. Does he have a strong need for recognition and praise? Does he thrive on power and status? Does he need close friends on whom to lean or can he work effectively independently? Does he tend to feel superior to others? Positive answers to these questions would indicate a personality who is likely to be unsuccessful as a change agent. On the other hand, is he comfortable in taking the initiative? Does he get satisfaction from helping other people? Does he establish warm and open relationships with people readily? Is he naturally inquisitive? Does he possess a healthy degree of self-confidence? Positive answers to these questions would indicate a·personality basically qualified. These, of course, are only some of the questions that should be taken into account.

Basic values are also important. The catalytic role, the system-builder functions and the cooperating role all require certain values and attitudes. They involve non-authoritarianism, permissiveness, faith in the possibilities of human effort, lack of prejudice towards lower castes, respect for differences in people, and basic integrity. These are some of the values that should be sought in persons who are expected to be successful as change agents.

Empathy with the Client Culture

Whether he works in the culture of a community or the culture of an institution such as a school or university, or both, the agent of change should have an understanding of that culture and should cultivate in himself the ability to see things from the point of view of his clients. Ability to do this is conditioned to

a degree by personality factors and values, but the ability can be developed through experience and training. It is one thing to know and understand facts, relationships, processes and values of a community or of an institution and its staff. It is another thing to sympathize with them to the point of being able to feel a part of them, to put yourself in their place. To do this, to truly empathize, does not imply acceptance or agreement with everything in the client culture, but it does mean a view from the inside so that the agent can understand why people behave and react as they do.

For instance, an extension coordinator may be working with a group of teachers who are unable to find time to meet and work on a particular project. They are very busy after school, in the evenings, and even in the morning with private tuitions. Any extra time has to go for family responsibilities. The coordinator may feel that nothing constructive can be accomplished without teachers giving up some or all of their private tuitions. He may oppose private tuitions for many reasons, but he will not be successful in finding a solution with this group of teachers unless he tries to look at the private tuitions question from their point of view. He must come to realize how financial factors and family responsibilities must be put ahead of improving teaching. Once he understands and accepts this fact he is in a position to work with the teachers to find a solution. Without empathizing with them he will only oppose them and reap their enmity.

The agent who empathizes with his clients will be able to understand why they behave as they do. With this understanding he will be motivated to find ways of making adjustments that are in harmony with or require less difficult changes in cultural patterns. In addition, empathy invites empathy, and so the clients who come to recognize the agent's understanding of their point of view will begin to go beyond the minimum in cooperating with development programmes, and less time and effort will be wasted and less frustrations experienced all around. Empathy must emanate from a basic interest in people. A person who has this quality can gradually develop the skill of asking the right questions and sensing the meanings of responses until he becomes skilled in getting inside the thinking and feeling of his clients.

Accepting and Valuing Change

Perhaps one of the more important qualities is that of accepting

and valuing change, in himself as well as in others. As a basis for this point of view the agent should understand the theory of social change, change dynamics, planned change, and the problems of developmental change. He should be a student of the increasing literature in this field, and he should have sufficient knowledge of sociology and anthropology to be an intelligent reader of the literature. He should be in touch with students of social change found among the faculty of universities and other agencies, and he should be in touch with change agents in fields of endeavour other than his own—agriculture, family planning, economic development, health and nutrition, and others. He should particularly be in touch with any research under way in India which may shed light on the process and problems of planned change in Indian cultural and social situations.

Over and beyond this contact with scholarship and practice of change, the change agent should himself exemplify willingness to change and grow through experience. He should be change-prone and innovative in his own work. He should seek to apply in his own work the generalizations discussed in this book, constantly analyzing his own rôle and methods as a possible explanation of success and failure in helping others to change. Instead of blaming the laziness of teachers or the uncooperativeness of administrators, he should be introspective about the way in which he is approaching them and the alternative methods that might be taken to involve them constructively.

Indian intellectuals, not unlike intellectuals everywhere, tend to theorize, to enjoy theorizing, and to justify their existence in terms of their adeptness in theorizing. There is no place for this among change agents. Solid theory is necessary, but it is not an end in itself. Practical application of theory is the end to which they should be dedicated. Unless they fully value change itself as a necessary element of personal and professional character, their knowledge and ability to theorize may be a burden rather than a help, and they may be like a donkey carrying a load of holy books.

The Training of Agents of Change in Education

Since the field of change and development among peoples and organizations is becoming a profession, the question of the training of change agents is assuming importance. Training program-

mes are already being developed in such fields as clinical psychology, social work, agricultural extension, community development, small industry development, social welfare and medical sociology. Beginnings have been made in the training of extension workers in education, among the various units of the National Council of Educational Research and Training, but these programmes have not fully recognized the extent to which the work of educational extension has to do with social change. In this book we have been concerned with present and future change agents in the field of education, including but not limited to the beginnings that have been made, nor to workers in educational in-service programmes.

Much of what has been discussed in this chapter—in this book —suggests ideas for the training of educational change agents. Any training programme should take into account the selection of candidates, pre-training motivation, alternate training strategies, the inclusion of experience and try-out in the training programme, sequence of training elements, post-training follow-up, involvement of administrators with whom the trained change agents will work, and other important considerations. Training can be either pre-service training or in-service training. Pre-service training, as part of the curriculum of a college, university or special training institution, will emphasize more the basic conceptual-theoretical ideas basic to skill and process.

In any training programme adequate attention should be given to the culture of the people among whom the agent will work, and the organizational and administrative structure within which he will work and within which his clients function. For agents of change in education, this includes both the general Indian culture and administrative framework and procedures, and the cultural and administrative framework of the educational establishment. It will be particularly important to include study of the cultural values that dominate decision-making among educational institutions and programmes.

More specifically, the planning of any training programme should begin with a clear and detailed statement of the objectives of the training to be done. A major weakness of many educational or training programmes—of much teaching that is done—is a lack of clearly thought out purposes. One major source of training objectives is the job the trainee is expected to do when his

16

course is finished. Field surveys, case studies and diaries kept by practitioners on the job are sources of objectives. The general discussion in this chapter of the rôles and functions of change agents provides the framework, but only a general one. Much more specific objectives are needed and they should be job oriented. Take, for example, the function of catalyst. The *general description* of the rôle is not enough. Who are the clients? What are their characteristics? What needs do they have that might be met by assistance from other groups or agencies? What are the potential sources or other systems which might profitably be linked to the client system? What sources are acceptable to the clients? What relationships, or lack of relationships, already exist which may be a barrier or aid in serving as a catalyst? What methods might be *most* successful? What skills are required to carry out these methods? How are the clients to be helped to see their need for a connection with another group or agency? How is the agency to be approached so that it will respond to the clients situation? These are only some of the questions that knowledge *of the job situation would help to answer, and the answers would* be helpful in planning training-programme content and method.

There is another side to the coin, however. Although training should be planned to prepare agents to work in a specific situation, under known circumstances, it should also be done in such a way that the trained agents are able to adjust to unexpected developments, even to assignments in situations quite different from the one anticipated, and to find a rôle for themselves regardless. In other words, a well-trained change agent will gradually evolve a constructive place for himself regardless of the situation in which he finds himself. It will help, however, if that situation can be anticipated. Specific training objectives can be elicited from careful thought about this characteristic. Some training programmes actually include "stress" and "structural frustration" to test and develop trainees' ability to adjust to difficult situations.

Training institutions should plan ways of getting a continuous feed-back from the field where their trainees are placed so that training can continuously be refined. This can be accomplished through a formal follow-up and evaluation programme, or through informal but planned contacts with trained agents and their associates. Knowing the work situations ahead of training, and feed back from the field, will *eliminate the common pattern of*

educating or training in the blind, with only a general knowledge of training objectives.

Also important is knowledge of the programmes of the country aimed at breaking through traditional patterns and establishing new approaches, and the principles guiding these programmes. The overall philosophy and role of national planning, the real meaning of socialism, and the place of individual projects and programmes in the overall plan, are particularly important elements of a training programme.

One key to a good training programme for change agents is the extent to which the programme exemplifies the principles the trained agents are expected to follow. It should be a model as to climate, permissiveness, planning procedures, democratic relationships among staff and trainees, adjustments in programme in response to interim evaluation by staff and trainees, freedom of trainees to participate in planning elements of their training, and recognition of individual differences among the trainees as to readiness, cultural background, experience and skill abilities, among other factors. The training situation, because it is isolated from an operational situation, can break new ground and show the relationship between new ground and traditional situations in which the trained agents will have to work. The situation is recalled wherein an extension official met with a group of headmasters. The headmasters were asked to report on their progress in planning with their staff. As each headmaster reported on his experience he obviously expected the extension official to tell him that his progress was good or bad. The official, being thoroughly non-directive in his orientation, refused to make a judgement, and turned questions about quality of work back to the headmasters. He insisted that his approval or disapproval was of no consequence, but that what was important was the headmaster's own evaluation. He asked questions that were intended to help the headmasters evaluate their own experience, a responsibility that they did not know how to handle. This is an example of an open contradiction between the traditional expectancy of headmasters and the newer thinking of the extension official. A training programme is the ideal setting in which to precipitate such contradictions and to discuss their implications.

During training trainees should have a chance to learn group skills including group decision-making, leadership, group discus-

sion, process-observing, rôle analysis and self-discipline in a group situation. There should also be opportunity to discuss the theoretical bases of group work and to generalize the experience during training to probable work situations. Persons qualified as professional trainers, if available, may be asked to take several days to set up a 'training laboratory' during which several kinds of group activities are carried out and analysed for purposes of constructive criticism of individual and group behaviour. This procedure must be carefully handled by a skilled and sensitive person who understands the psycho-cultural characteristics of the trainees and their maturity to undergo public revelation and discussion of their innermost motivations and reactions. If successful, this procedure can help the trainees to understand themselves in ways relevant to their future tasks as change agents. If unsuccessful, confusion, resentment and low morale may result.

Another important element of a good training programme is actual experience in a real situation of working with teachers on an aspect of a change programme. This may be accomplished by taking groups of trainees to a school or organizing a meeting of teachers at the training site. Following or preceding a few carefully planned real experiences, sociometric exercises, case discussions, rôle playing, and simulation games can be used to help generalize the real experience. Ample time should be provided for analysis and discussion of these and other training devices after their use.

Of particular importance in training is the internship, followed by an evaluation of the experience. Trainees, following formal training, should be placed with practicing change agents for a number of weeks. During this time the training staff should visit them and confer with the senior practitioners with whom they are interned. Following this period the trainees should be brought back together to evaluate and discuss their experience, and the staff should pick up clues for further coverage in training. Whether training is pre-service or in-service, there should be a period for practice followed by evaluation and further training. If trainees are to be assigned to jobs in locations where they can come back together, additional sessions should be planned after every few months of work. These additional sessions can be built around work problems and some of the persons with whom the new agents work can be included so that the training is spread to co-workers.

Some don'ts may be obvious, but we will mention them anyway. Don't run training programmes on authoritarian lines; however, don't break so far away from tradition that the trainees cannot accept the training methods. Don't fail to recognize trainees' needs for the reassurance that comes from clearly organized subject-matter and procedures as well as new, informal and unstructured training procedures. Don't rely on lecture after lecture after lecture after lecture. Don't fail to brief any outsider brought in as a lecturer on the methods that are being used and his role in those methods. Don't include training in methods that are unrealistic for the work situation in which the trainees will be assigned. And, by all means, involve the trainees so that they can anticipate and understand what is being done, why and what comes next.

We are not attempting to cover training in a comprehensive manner herein. Training is also becoming a professional specialization and the reader may be interested in searching the growing body of literature in this field. The bibliography at the end of this book will be helpful.

SELECTED READINGS*

1. Arensberg & Niehoff, 1964, chap. 7.
2. Bennett, 1961.
3. Bennis et al., 1962, chaps. 11 and 12.
4. Corey, 1963.
5. Culbertson, 1963, chap. 1.
6. Foster, 1962, chap. 9.
7. Goodenough, 1963, chap. 14.
8. Hayes, 1965.
9. Hodgkin, 1957.
10. Lippitt et al., 1958, chaps. 5 and 11.
11. Lynton & Pareek, 1967.
12. Miller, 1967, chap. 13.
13. Morris, 1964, pp. 102-124
14. Rogers, 1962, chap. 9.
15. Seashore & Bowers, 1963.
16. Watson, 1967 (a). chap. 6.

* The books referred to in this list are included in the select annotated bibliography appearing at the end of the book.

Select Annotated Bibliography

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Selected readings have been suggested at the end of each chapter. The sources of such readings and other references are cited here. Only books and monographs have been included in this select bibliography. No attempt has been made to classify the bibliography; it could be classified in several ways. However, for the convenience of the readers a few categories are suggested below.

Books of Readings: Anderson & Bowman, 1965; Barringer *et al.,* 1965; Benne & Muntyan, 1951; Bennis, Benne & Chin, 1962; Coleman, 1965; Etzioni & Etzioni, 1964; Harris *et al.,* 1965; Montgomery & Soffin, 1966; Moore & Cook, 1967; Nordskog, 1960; Singer, 1959, Spindler, 1963; Worchel & Donn, 1964; Zollschan & Hirsch, 1964.

Case Studies: Bailey, 1963; Braibanti & Spengler, 1961 (chap. 9); Brickel, 1961; Carlson, 1965; Contours.... 1963; Dubey, 1958; Erasmus, 1961 (Part 3); Etzioni, 1966 (Part 4), Gaudino, 1965; Goldhammer, 1964; Hogbin, 1958; Levine, 1964; Madigan, 1962; Malinowski, 1965; Marris, 1961; Matras, 1965; Mead, 1953; Miller, 1967 (chaps. 7 to 12); Miles, 1964 (chaps. 2 to 10), Mort & Cornell, 1961; Niehoff, 1966; Ross, 1958; Selosoemardjan, 1962, Sivertsen, 1963; Spicer, 1952; Steward, 1955 (Part 3)

Research Studies: Aiyappan, 1965; Barrington, 1953; Benvenuti, 1962; Bettelheim & Janowitz, 1964; Cocking, 1951; Coleman *et al.,* 1966; Epstein, 1962; Etzioni, 1966 (Part 2); Leeper, 1965 (chap. 3); Madigan, 1962; Matras, 1965; Miles, 1964 (chaps. 11 to 16); Mukherji, 1965; Neal, 1965; Rao, 1957, Schuman, 1967; Seashore & Bowers, 1963; Singer, 1959.

Theory: Allen *et al.* 1957 (chap. 5), Barnett, 1953; Barringer *et al.* 1965 (chap. 3), Benne & Muntyan, 1966; Erasmus, 1961 (Part 1); Etzioni, 1966 (Part 3); Coleman *et al.,* 1966; Etzioni & Etzioni, 1964, (Part 1, 2); Hagen, 1962; Hogbin, 1958 (chap. 1); Johns, 1963 (chap. 12). La Piere, 1964; McClelland, 1961; Marris, 1961 (pp. 61-86); Martindale, 1962 (chap. 1). Mead,

1964; Morris, 1964 (pp. 12-40); Neal, 1965 (chaps. 1, 2); Ogburn, 1950; Petter, 1966; Ponsioen, 1962; Rogers, 1962 (chap. 11); Ross, 1958 (Part 1, 2), Sims, 1939; Steward, 1955 (Part 1, 2); Worchel, 1964 (Part 2).

bibliography on Change: Bhola, 1965; Kurland & Miller, 1966; Lionberger, 1960 (pp. 111-160); Niehoff & Anderson, 1964; The process...., 1965; Rogers, 1962; Rogers & Smith, 1966.

Barriers to Change: Abbott & Lowell, 1965 (chap. 4); Carlson et al., 1965 (a) (chap. 1); Cocking, 1951; Culbertson, 1963 (chaps. 2, 3), Foster, 1962 (chaps. 5, 6, 7); Gardner, 1963; Johns, 1963 (chap. 11); Watson, 1967 (pp. 10-36).

1. Abbott, Max C. & Lowell, John T. (Eds.). *Change perspectives in educational administration.* Auburn, Alabama: Auburn University, 1965, 87p.

    Six papers presented at a seminar on change processes. The seminar was concerned with identifying and defining basic forces in American society that impinge upon the educational institution, analysing specific implications of these forces on the educational institution, and discussing different aspects of the change process.

2. Aiyappan, A. *Social revolution in a Kerala Village.* Bombay: Asia Publishing House, 1965, 183p.

    Study of a village and the cultural changes in the village, including social practices and leadership.

3. Allen, Francis R. *et al. Technology and social change.* New York: Appleton Century Crofts, 1957, 529p.

    Discusses the impact of technology on social change, presenting a panoramic picture of change, the persistent all-round transformation of the social environment.

4. Anderson, Arnold and Bowman, Mary Jean. *Education and economic development,* Chicago: Aldine Publishing Co., 1965, 436p.

    Papers presented in a conference on the role of education in the early stages of development. The 22 papers are grouped under four parts—the investment view of human resources and the matter of "shortages", the formation of human competences, the diffusion of schooling, technologies and educational opportunities, and the human factor preconditions, the time of emergence and the pace of change Chapters 2 and 9 are on India.

5. Arensberg, Conrad M. & Nichoff, Arthur H. *Introducing social change,* Chicago: Aldine Publishing Co., 1964, 214p.

    Discusses the problem of introducing change in the context of cultural factors and unplanned cultural changes. Analyses the profile of underdeveloped areas and discusses field problems of the innovator.

6. Bailey, Frederick George. *Politics and social change; Orissa in 1959.* Berkeley: University of California Press, 1963, 241p.

    A study of the relationship between parliamentary democracy in Orissa and the older traditional forms of social and political organizations.

7. Barnett, H. G. *Innovation: the basis of cultural change.* New York: McGraw-Hill, 1953, 462p.
   Elaborates a general theory of the nature of innovation. Analyses the conditions for and immediate social consequences of the appearance of novel ideas. The theory has been elaborated with material on change in six cultures. Incentives for innovation, innovative processes and acceptance and rejection have been discussed in detail.

8. Barringer, H. R.; Blanksten, G. I.; & Mach, R. W. (Eds.). *Social change in developing areas.* Cambridge, Mass.: Schenkman Publishing Co., 1966.
   The papers herein discuss the problems of social change to show the influence of evolutionary theory on contemporary social science.

9. Barrington, Thomas M. *The introduction of selected educational practices into teachers colleges and their laboratory schools.* New York: Teachers College, Columbia University, 1953, 112p.
   Report of an investigation of the capacity of teachers' colleges for accepting and diffusing change.

10. Benne, Kenneth D. and Muntyan, Bozidar (Eds.). *Human relations in curriculum change.* New York: Dryden Press, 1951, 363p.
    A book of readings in group development in relation to curriculum change, mainly discussing human relations, conceptual tools, groups and group methods in curriculum change, democratic ethics, and management of change, emphasizing that curriculum change means change in people.

11. Bennett, Thomas R. *The leader looks at planning for change.* Washington, D. C.: Leadership Resources Inc., 1961, 17p.
    A monograph for the leader and executive, presenting practical suggestions for planning change and dealing with resistance to change.

12. Bennis, Warren G.; Benne, Kenneth & Chin, Robert (Ed.). *The planning of change: Readings in the applied behavioural sciences.* New York: Holt, Reinehart and Winston, 1962, 781p.
    The readings are grouped into four parts dealing with the roots of planned change, conceptual tools for the change agent including change models, dynamics of influence process, and problems and technologies of planned change.

13. Benvenuti, B. *Farming in cultural change.* Amsterdam: Royal Van-goreum Ltd., 1962, 464p.
    Gives details of a study of 520 Dutch farm operators, with questionnaires, and attempts to relate human factor to the existing cultural pattern. The book is mainly concerned with the study of diffusion of new farm practices.

14. Bettelheim, Bruno and Janowitz, Morris. *Social change and prejudice with* New York: Free Press, 1964, 337p.
    Contains previously published volume *Dynamics of prejudice* with special evidence collected from decade of social change.

reference to the decline of American anti-Semitism and anti-Negro prejudice.

15. Bhola, Harbans Singh. *Innovation research and theory.* Columbus, Ohio: School of Education, Ohio State University, 1965, 155p. (mimeographed).

Discusses the present status of innovation research and theory, and methodological, and organizational strategies for innovation in education. Includes an extensive bibliography.

16. Black, C. E. *The dynamics of modernization. A study in comparative history.* New York: Harper & Row, 1966, 207p.

Discusses the processes of change in the world today in the perspective of modernization that started in Europe, and presents a chronological timetable for the development of modernizing societies, suggesting seven main patterns of growth referring to the experience of 175 contemporary societies with predictions as to their future.

17. Blanke, Virgil E. (Ed.) *Planning for educational change.* Columbus: Ohio State University, 1966, 60p.

A special issue of *Theory into Practice* (Vol. 5, no. 1) discussing the concept of change in various disciplines and at the various educational levels—classroom, school, state department, federal government.

18. Braibanti, Ralph & Spengler, Joseph J. (Ed.). *Tradition, values and socio-economic development.* Durham, N. C.: Duke University Press, 1961, 305p.

Nine papers by social scientists (anthropology, economics, history, political science, sociology) on the effect of tradition and values in socio-economic development.

19. Brickell, Henry M. *Organizing New York State for educational change.* Albany: New York State Education Department, 1961, 107p.

Discusses the dynamics of instructional change in the elementary and secondary schools of New York State, with recommendations for improved organization.

20. Carlson, Richard O. *Adoption of educational innovations.* Eugene: University of Oregon, 1965, 84p.

Discusses the role of social structure in the adoption and diffusion of new educational practices, and reports a case study of the adoption of programmed instruction.

21. Carlson, Richard O. et al. *Change processes in the public schools.* Eugene: Center for the Study of Educational Administration, 1965 (a) 92p.

Report of a special seminar on change containing the papers read.

22. Cerych, Ladislav. *Problems of aid to education in developing countries.* New York: Frederick A. Praeger, 1965, 213p.

Examines various aspects of external aid to develop education and the ways of making it more effective and coordinated internationally. Concludes with a chapter on an approach to the educational aid strategy.

ANNOTATED BIBLIOGRAPHY

23. *The challenge of curricular change.* New York: College Entrance Examination Board, 1966. 15p.
    An "outgrowth" of, a colloquium on the subject "to provide influential educators in schools and colleges with an opportunity to engage in discussion concerning the implication to colleges of curricula changes in secondary schools."

24. Coleman, James S. (Ed.) *Education and political development.* Princeton: Princeton University Press, 1965. 620p.
    A collection of papers dealing with interrelationships between education and modernization.

25. Coleman, James; Katz, Elihu & Menzel, Herbert. *Medical Innovation: a diffusion study.* Indianapolis: Bobbs-Merril Co., 1966, 267p.
    A study of the social networks effectively diffusing adoption of a new drug by medical people in four communities. Presents a "contagion" model of adoption and also one for the isolated adopters.

26. *Contours of culture change in south Asia.* Ithaca: Society for Applied Anthropology, 1963, 104p.
    A special issue of *Human Organizations* dealing with traditions and institutions, processes of change and directed change; most of the papers are on India.

27. Cocking, Walter. *The regional Introduction of educational practices in urban school systems of the United States.* New York: Bureau of Publications, Teachers College, Columbia University, 1951, 86p.
    Report of a study of the conditions that facilitate or inhibit adoption and diffusion of change in the public schools.

28. Corey, Stephen M. *Helping other people change.* Columbus: Ohio State University Press, 1963, 89p.
    From his experience as a consultant to teachers and administrators of schools in the U.S.A. and India, the author shares his sensitive approach as a change agent who helps other people more effectively to work out their own answers to problems in the context of their culture and their needs.

29. Culbertson, Jack (Ed.) *Changing the school,* Columbus: Ohio State University, 1963.
    A special issue of *Theory into Practice* (Vol. 2, no. 5) on educational change and the principal's role.

30. Doob, Leonard William. *Becoming more civilized, a psychological exploration.* New Haven, Conn : Yale University Press, 1960, 335p.
    A discussion of psychological exploration of what changes occur in people who are "modernized"—changes in their ways of thinking, in their systems of self-guiding rewards, in their beliefs, in their personalities. The author draws heavily on his researches in Africa and Jamaica and quotes results of other researches.

31. Dube, S. C. *India's changing villages.* London: Routledge & Kegan Paul Ltd., 1958, 230p.
    Describes an experiment in rural development in an Indian village, with special emphasis on response to change and the role of the change agent in the project.

32. Eisenstadt, S. N. *Modernization, protest, and change.* Englewood Cliffs, N. J.: Prentice-Hall, 1966.

Focuses on modernization as a process of continuous change and system-transformation, and on the ability of different modern societies to deal with problems of continuous change.

33. Epstein, T. S. *Economic development and social change in South India.* Manchester: Manchester University Press, 1962, 353p.

Discusses the effect of economic opportunities on social development and social institutions in the study of two villages in Mysore.

34. Erasmus, Charles J. *Man takes control; cultural development and American aid.* Minneapolis, Minn.: University of Minnesota Press, 1961, 365p.

Discusses cognitive and motivational components of cultural causality and the process of cultural development. A case study of cultural development in Northwestern Mexico is described.

35. Etzioni, Amitai. *Studies in social change.* New York: Holt, Reinehart & Winston, 1966, 226p.

Presents two sets of studies in detail, one of elites and control structures (part one) and the other of strategies of change (part two), followed by an attempt at construction of theory of change (part three), and ending with three case studies (part four).

36. Etzioni, Amitai & Etzioni, Eva. *Social change: sources, patterns and consequences.* New York: Basic Books, 1964, 503p.

Contains readings on brief theoretical discussions, illustrations of specific social changes, concern for a variety of social systems in change, and specific process by which social change develops.

37. Foster, George M. *Traditional cultures and the impact of technological change.* New York: Harper & Bros., 1962, 292p.

An anthropological analysis of planned change. The book discusses the theory of dynamics of change, and barriers to change—cultural, social and psychological. Stimulants to change are also discussed.

38. Gardner, John W. *Self-renewal.* New York: Harper and Row, 1963, 141p.

Looking at society as a whole, and institutions within a society, this book discusses growth, decay and renewal; self renewal; versatility; innovation and obstacles to renewal; tyranny without a tyrant; conditions necessary for renewal and ways of organizing for change; individuality and its limits; and attitudes towards the future.

39. Gaudino, Robert L. *The Indian university.* Bombay: Popular Prakashan, 1965, 268p.

Discusses the *situation* of the university in India, its administrative identity, internal and external pressures, leadership, loyalties of the staff, students and the relationship of these with one another. The dilemmas faced by the Indian university are also discussed, as well as the ability of the university to change.

40. Goldhammer, Keith, and Farmer, Frank. *The Jackson County story.*

Eugene, Center for the Advanced Study of Educational Administration. University of Oregon, 1964, 52p.
A case study of the introduction and management of change in the Jackson County Schools, for use in in service education of school administrators.

41. Goodenough, Ward Hunt. *Cooperation in change; an anthropological approach to community development.* New York: Russel Sage Foundation, 1963, 543p.
The book is in two parts, one devoted to theory and the other to practice. Discusses what is known about the role of custom and belief in human affairs, paying special attention to the emotional investments of people in their customs, leading to a general theory of culture and culture change, taking account of individual moves Revolutionary and other social movements are examined as natural and predictable phenomena that are intimately linked with the development process.

42. Hagen, Everett E. *On the theory of social change: how economic growth begins.* Homewood, Illinois: Dorsy Press, 1962, 557p.
Presents a model or paradigm of the process of social change with a view to illuminating the roles of social and psychological factors in starting the process of economic growth Attempts to identify the common elements, and their interrelationships, that can explain variations in the social structures and dynamics of traditional societies in transition, both in the past and today.

43. Hanson, John W. & Bremberk, Cole S. *Education and national development.* New York: Holt, Rinehart & Winston, 1965, 512p
Focuses on education in the role of the development of nations; also discusses the philosophical and ethical aspects of change.

44. Harris, Seymour E.; Deitch, Kenneth M.; and Levenschn, Alan. *Challenge and change in American education.* Berkeley, California: McCutchan Publishing Corporation, 1965, 346p.
Summaries of deliberations of a seminar held at the Harvard University Graduate School of Public Administration in 1961-62 Deals with government and education, challenges of educational planning and management of colleges and universities.

45. Hartley, Harry J. & Holloway, George E. *Focus on change and the school administrator.* Buffalo, N. Y.: School of Education, State University of New York, 1965, 86p
Contains eight of the papers initially presented in a six-week seminar on educational change, mainly relating to organizational effectiveness.

46. Hayes, Samuel P. Jr. *Evaluating development projects* Paris: Unesco, 1965, 116p
Written especially for those responsible for planning and carrying out development projects, this booklet is a guide to the evaluation of development efforts, dealing with four steps of evaluation: describing the project and specifying its goals, deciding what data to use to indicate project results, collecting the data—before, during

and after, and analysing and interpreting the findings.

47. Heinrich, June Sark. *Teacher education extension service: a practical guide to understanding issues and problems in American education.* Chicago: Science Research Associates, 1967.

A set of three series of eight monthly units each, appearing monthly from October through May, 1967, Unit eight in series 2, (May, 1967) is *How to bring about change in a school system* (27p.) presenting proposals, discussion questions, review and summary and bibliography. Other pertinent units are six (*The changing role of the teacher*), seven (*Innovation in education: some examples*), and eight (*Planning a good in-service education program*).

48. Hodgkin, Robin N. *Education and change.* London: Oxford University Press, 1957, 150p.

Discusses how education can be used as a part of a process of rapid social change.

49. Hogbin, Herbert Ian. *Social change.* London: Watts, 1958, 257p.

Discusses evolutionary approach to social change, illustrating extensively from changing Melanesian institutions and culture.

50. Huq, Muhammad Shamsul. *Education and development strategy in South and Southeast Asia.* Honolulu: East-West Center Press, 1965, 286p.

Discusses development as a world movement and its nature as a total process, the past neglect of the contribution of education to development, a brief sketch of the history, land and people of Indonesia, Pakistan, the Philippines and India, their development experience and the place of education in that experience. Emphasizes the need to pay attention to the human aspects of development and to the changes necessary in values, attitudes, social behaviour and leadership to which education can contribute a great deal.

51. International Sociological Association. *The sociology of development.* Louvain, Belgium, 1962.

Discusses the problems of social development including economic requirements of modern industrialism, traditional ethics of work, entrepreneurship, industrialization and industrialism, problems of social and cultural integration, urbanization and economic development, administration and bureaucracy.

52. Johns, Ray Earl. *Confronting organizational change.* New York: Association Press, 1963, 160p.

Discusses the role played by different individuals in change within a community service organization and focusses on the role of the administrative leaders.

53. King, E. J. *Education and social change.* New York: Pergamon Press, 1967, 239p.

Discusses changes in the direction, attitude and policy in education leading to social change.

54. Kurland, Norman D. and Miller, Richard I. *Selected and annotated bibliography on the processes of change.* New York: New York State Education Department, 1966, 41p.

Gives annotated bibliography of selected books, pamphlets and articles according to disciplines. A list of bibliographies and periodicals on change is also given.

55. Kushner, Gilbert *et al. What accounts for sociocultural change? A propositional inventory.* Chapel Hill: Institute for Research in Social Science, University of North Carolina, 1962, 51p.
Contains an inventory of propositions under twelve categories, with introductory summary and a select bibliography.

56. La Piere, Richard T. *Social change.* New York: McGraw-Hill, 1964, 556p.
Propounds a general theory of change derived from historical and contemporary evidences, the main thesis being that deviant individual members of the society, rather than the social system itself, initiate and sustain change.

57. Leeper, Robert R. (Ed.) *Strategy for curriculum change.* Washington, D. C. Association for Supervision and Curriculum Development, 1965, 75p.
Contains the papers and discussions given at the first ASCD seminar on the topic.

58. Leeper, Robert R. (Ed.) *Curriculum change: direction and process.* Washington, D. C.: Association for Supervision and Curriculum Development, 1966, 68p.

59. Lerner, Daniel. *The passing of traditional society.* Glencoe, Illinois. The Free Press, 1958, 466p.
A study of modernizing individuals and institutions in Turkey, Lebanon, Egypt, Syria, Jordan, and Iran. Uses indices of urbanization, literacy, media, and political participation to determine the degree of modernization, correlating changes in personal characteristics with institutional changes.

60. Lerner, Daniel and Schramm, Wilbur (Eds.) *Communications and change in the developing countries.* Honolulu: East-West Press, 1967, 333p.
A symposium of experts who spent one month at the East-West Center examining the relationship between communications and change in several countries, including India, China and the Philippines.

61. Levine, Donald N. *Wax and gold. tradition and innovation in Ethiopian culture.* Chicago: University of Chicago Press, 1964, 392p.
Discusses the nature of tradition, its enduring values, its role in resisting and facilitating change, the means through which the change is institutionalized. Use is made of Ethiopian literature in discussing the obvious and the hidden meanings.

62. Lionberger, Herbert Frederick. *Adoption of new ideas and practices.* Ames: Iowa State University Press, 1960, 164p.
A summary of the research dealing with the acceptance of technological change in agriculture, with implications for action in facilitating such change. Discusses the individual adoption process, the community adoption process and the various factors in adoption.

63. Lippitt, Ronald; Watson, Geane & Westley, Bruce. *The dynamics of planned change.* New York: Harcourt, Brace & World, 1958, 312p.
A treatise on the theory and practice of planned change with special emphasis on techniques to help bring about change and relationships of the change agent with the community. Relevant case materials are discussed. Each chapter is concluded with a summary.

64. Lynton, R. P. and Pareek, Udai. *Training for development.* Homewood, Ill.: Richard D. Irwin, 1967, 410p.
Discusses training as a process of improving an organization through improving people working on jobs in the organization. Pre-training, training, and post-training phases are discussed in detail, as well as training institution and research for training. Presents conceptual models and poses practical questions on several aspects of training.

65. McClelland, David C. *The achieving society.* Princeton, N. J.: Van Nostrand, 1961.
Presents a theory of economic development as caused by development of achievement motivation in a nation through child rearing practices. Cites results of researches both of past cultures and contemporaneous societies to support this theory.

66. Mack, Reuymond W. *Challenge of change.* New York: Random House, 1967, 300p.
Discusses value systems in American society, focussing on those emerging since the last war, and their relationship with orthodox sociological questions.

67. Madigan, Francis C. *The farmer said no.* Manila: University of the Philippines, 1962, 359p.
A study of factors (demographic, personal, socio-economic and psychological) associated with dispositions to cooperate with or resist community development programmes in the Philippines.

68. Malinowski, Branslaw. *The dynamics of culture change.* New Haven: Yale University Press, 1945, 171p.
A study of race relations in Africa. The first part deals with theory of culture and cultural change. A classic in the field.

69. Mann, Flyod C. & Neff, Franklin W. *Managing major change in organizations.* Ann Arbor: The Foundation for Research in Human Behavior, 1961, 99p.
Growing out of conference report the publication discusses the *points deserving attention from the point of view of managing* change in connection with preparing an organization for change, establishing behavioural objectives, maintaining change momentum, completing and stabilising change. The last section discusses the theory of management of change.

70. Marris, Peter. *Family and social change in an African City.* Evanston, Illinois: Northwestern University Press, 1962.
A detailed study of a slum clearance and rehousing project in Lagos, Nigeria, from the point of view of its effects on the way of living of the people involved. Discusses the more basic cleavages in attitudes and values within changing Nigerian society.

71. Martindale, Don Albert. *Social life and cultural change.* Princeton: Van Nostrand, 1962, 528p.
Based on the "social behaviorism" theory of social change. The book focusses on the formation of communities and social thought. Five case histories of the interrelation of community, the intellectual and the civilization are included—the Chinese Mandarin, the Indian Guru, priests and prophets in Palestine, philosophy and sophists in Greece, and humanists and scientists in the Western world.

72. Matras, Judah. *Social change in Israel* Chicago: Aldine Publishing Co., 1965, 224p.
Discusses the main changes in social structure and ideologies among the old and new populations in Israel, in terms of population size, distributional characteristics and participation in the political, educational, economic, religious and family affairs.

73. Mead, Margaret (Ed.) *Cultural patterns and technical change.* Paris: Unesco, 1953, 348p.
Report of a survey indicating the kind of thinking and activity which may be of value in facilitating technological change and in preserving cultural integrity and mental health. Five studies of whole cultures and six studies of cross-cultural changes have been included and discussed.

74. Mead, Margaret. *Continuities in cultural evolution.* New Haven: Yale University Press, 1964, 471p.
Discusses change as an evolution resulting from communication and creativity appearing under conditions of conscious urgency. The importance of the intercommunicating group of human beings is pointed out, with an emphasis on the need of conscious creation of conditions within which clusters of evolutionary significance may appear.

75. Miller, Richard I. (Ed.) *A multidisciplinary focus on educational change.* Lexington, Kentucky: Bureau of School Service, University of Kentucky, 1965, 84p.
Reports the 1965 Midwest Regional Conference of Elementary Principals which focused upon change—various perspectives of change and needed research in change.

76. Miller, Richard I. *Perspectives on educational change.* New York: Appleton-Century Crofts, 1967, 392p.
An up-to-date survey of educational change in the United States, including case-stories of change programmes in schools, the role of the State Department of Education, the role of the local school district, and chapters by leading experts on educational change. Opening and closing chapters give an excellent overview of educational change in the United States, and suggestions for making change programmes more effective.

77. Miles, Mathew B. (Ed.) *Innovation in education.* New York: Teachers College, Columbia University, 1964, 689p.
The first part contains Contributions are grouped under three parts. The first part contains reports and case studies of some innovations, the second deals with

research and theory of *innovation in education*, and the third with the American Educational System.

78. Montgomery, John D. and Siffin, William J. (Eds.) *Approaches to development: politics, administration and change.* New York: McGraw-Hill Book Co. 1966, 299p.

An integrated collection of articles, this book provides a diverse set of perspectives on the theoretical and practical aspects of administrative development, with particular concern for the close connection between *administration and its socio-political setting.* Articles deal with government and politics as instruments of development, bureaucracy and development, and the role of public administration to improve development administration.

79. Moore, Wilbert E. *Social change.* New York: Prentice Hall, 1963, 120p.

Discusses the character of social groups and patterns of action. The book is concerned with large institutional complexes that shape alterations in whole societies, with particular emphasis on the spread of missionary religions, external law and the recent economic changes.

80. Moore, Wilbert E. and Cook, Robert M. (Eds.) *Readings on social change.* Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967, 242p.

This collection of readings, assembled from various sources and various scholarly traditions, ranges widely over the social cosmos and over the temporal spectrum of change. Papers include those on the normality of change, the qualities of change, small scale change, changes in societies, modernization, and social evolution.

81. Morris, Robert (Ed.) *Centrally planned change: prospects and concepts.* New York: National Association of Social Workers, 1964, 149p.

Contains five papers presented and summaries of discussions on these in a workshop on the subject. The topics covered include theory of social change and the role of professionals in planning change, especially in social welfare.

82. Mort, Paul R. and Cornell, Francis G. *American school in transition.* New York: Bureau of Publications, Teachers College, Columbia University, 1941, 528p.

An extensive study of nine practices adopted throughout the state of Pennsylvania and the diffusion pattern involved, and the administrative, community, sociological, individual, and agency factors in the adoption process and their effect on diffusion.

83. Mukherjee, R. *The sociologist and social change in India today.* New Delhi: Prentice Hall of India, 1965, 229p.

A collection of papers on the facts and fallacies about social change in India, the role of Indian sociologists in social change, and reports of a few empirical studies.

84. Neal, Marie Augusta. *Values and interests in social change.* Englewood Cliffs, N. J.: Prentice-Hall, 1965, 182p.

Examines the relationship between the direction of broad historical

trends and the daily intercommunication among people in decision-making roles, being on results of research with clergy in a local community.

85. Nelson, Lowry. *Community structure and change.* New York: Macmillan Co., 1960, 464p.
   Furnishes a meaningful theoretical framework for community analysis and demonstrates practical application to both rural and urban community development.

86. Niehoff, Arthur H. & Anderson, Charnel. *A selected bibliography of cross-cultural change projects.* Washington, D. C.: George Washington University, 1964, 30p.
   A bibliography classified according to countries.

87. Niehoff, Arthur H. (Ed.) *A casebook of social change.* Chicago: Aldine Publishing House, 1956, 312p.
   Nineteen case histories of actual efforts at innovation in Latin America, Africa, the Middle East and Asia illustrate the specific problems facing American change agents abroad and define the basic ingredients of socio-economic change. This book presents essential guidelines for perceiving and dealing with the cultural aspects of a change situation for students of applied anthropology, technical advisors and administrators, businessmen and students living overseas, and missionaries teaching non-Western peoples.

88. Nordskog, John Eric. *Social change.* New York: McGraw-Hill, 1960, 423p.
   A book of readings on cultural, political, economic, legal and ideational changes.

89. Odegard, Peter H. *Political power and social change.* New Brunswick: Rutgers University Press, 1966, 111p.
   Reprint of the 1965 Brown and Haley Lectures, discusses the contemporaneous factors in social change and the role of political power in their context.

90. Ogburn, William F. *Social change.* New York: Viking Press, 1950, 423p.
   A treatise on social change as a process of readjustment necessitated by culture lag.

91. Ogburn, William F. *On culture and social change.* Chicago: University of Chicago Press, 1964, 360p.
   Selected papers of Ogburn on social evolution, social trends, short run changes and methods in social sciences from 1922 to 1955.

92. Petter, H. W. *Comparative theories of social change.* Ann Arbor: Foundation for Research on Human Behaviour, 1966, 372p.
   Discusses various theories of social change.

93. Piper, Don C. & Cole, Taylor (Ed.) *Post-primary education and political and economic development.* Durham, N. C.: Duke University Press, 1964, 238p.
   Discusses the influence of post-primary education on economic and political development, with special reference to Africa and Asia.

94. *Planning socio-economic change.* Raleigh, N. C.: North Carolina State University, 1964, 133p.

A collection of 5 papers read at an invitational conference of social scientists and detailed comments of discussants on these papers. The topics include social and cultural factors in economic change, structural continuity and the process of planning change, a political science approach to planning change, a new role for the behavioural sciences: effecting organizational change, and planning change in the underdeveloped countries.

95. Ponsioen, J. A. *The analysis of social change reconsidered.* The Hague: Nauiton, 1962, 170p.

Briefly discusses theories of change of about two dozen sociologists and the different typologies of society.

96. Prasad, Nageshwar & Juyal, B. N. (Ed.) *Impediments to development in developing countries.* Varanasi: Gandhian Institute of Studies, 1966.

Contains papers presented in a seminar, emphasising cultural factors.

97. *The process of change.* East Lansing: Michigan State University, School of Education, 1965, 103p. (Mimeographed)

Annotated bibliographies on different aspects of change classified under 20 headings.

98. Rao, M. S. A. *Social change in Malabar.* Bombay: Popular Book Depot, 1957, 223p.

Analyses facts and processes of rapid transition in occupational activities, family life, religious activities, educational activities and community life in Malabar.

99. Read, Margaret. *Education and social change in tropical areas.* London: Thomas Nelson & Sons, 1953, 130p.

The treatment in this book is much wider than the title suggests. It deals more with the analysis and exposition of the contributions which anthropology and sociology can make to vitally important practical fields of human behaviour. The book as a whole is concerned with the impact of new ideas, new ways of living, new methods of working on people who have existed for many centuries in a traditional culture.

100. Rogers, Everett M. *Social change in rural society.* New York: Appleton Century Crofts, 1960, 480p.

A text book in rural sociology, consisting of four parts, one of which is devoted to discussions on how changes are affecting rural society.

101. Rogers, E. M. *Diffusion of innovations.* New York: Free Press, 1962, 367p.

Reviews more than 500 researches available both in printed and manuscript form on adoption and diffusion of new practices in the fields of agriculture, education, medicine and technology. Gives broad generalizations emerging from the various studies.

102. Rogers, Everett. M. & Smith, Leticia, *Bibliography on the diffusion of innovations.* East Lansing: Michigan State University, 1966, 113p. (Mimeographed)

Lists publications alphabetically according to authors, also mentioning authors' diffusion research traditions. Several bibliographies in this series have already appeared.

103. Ross, Donald H. (Ed.) *Administration for adaptability*, New York: Metropolitan School Study Council, Teachers College, Columbia University, 1958, 643p.
A source book drawing together the results of more than 150 individual studies related to the question of *why* and *how* schools improve.

104. Schuman, Howard. *Economic development and individual change. a socio-psychological study of the Comilla Experiment in Pakistan*, Cambridge, Mass.: Center for International Affairs, Harvard University, 1967, 59p.
Describes a study of the changes in villages under Comilla Cooperatives, showing psychological changes congruent with and perhaps mediating the purely economic changes.

105. Seashore, Stanley E. & Bowers, David D. *Changing the structure and functioning of an organization*. Ann Arbor: Survey Research Centre, University of Michigan, 1963, 113p.
Reports in detail methodology and results of a study and spells out the change agent's role and the 'spill over' effects to adjacent departments in an organization.

106. Selosoemardjan. *Social changes in Jogjakarta*. Djakarta, 1962, 440p.
Analysis of recent social changes in Java's rural community. The book surveys the historical changes, the administration of Jogjakarta, from the administration under a Sultan through the Dutch colonial period to 1958. Particular emphasis is given to village communities.

107. Sims, Newell L. *The problem of social change*. New York: Crowell, 1939.
Deals with theories of social change and the process of social change as a purposive process.

108. Singer, Milton (Ed.) *Traditional Indian structure and change*, Philadelphia: The American Folklore Society, 1959, 332p.
A collection of papers on social organization of tradition, cultural performances and problems and processes of change in India.

109. Sivertsen, Dagfinn. *When caste barriers fall: a study of social and economic change in a South Indian village* Oslo: Universitets Forlaget, 1963, 141p.
Discusses the social life of a village in South India and the role of new political activity in producing change in the traditional social framework.

110. *Social changes and sports*. Washington, D. C.: American Association of Health, Physical Education, and Recreation, NEA, 1958, 112p.
Proceedings of the National Conference on Social Change and Implications for Physical Education and Sports Programs Main papers and summaries of discussions are given.

111. Spicer, Edward H. *Human problem in technological change: a case book*. New York: Russel Sage Foundation, 1952, 301p.

A case book containing 15 cases of introduction of change in different cultures. The cases range from simple to complex. The cases are presented for stimulating learning of dynamic principles of change. Suggestions for study of each case are given.

112. Spindler, George D. (Ed.) *Education and culture.* New York: Holt, Rinehart and Winston. 1963, 571p.

The application of anthropology to education, explores the transmission of culture and the values related to educational processes and events. Part 1 deals with the problems involved in applying anthropological methods, concepts and data to education; part II deals with these problems in American education; and part III provides cross-cultural perspective by analyzing education in non-Western cultural setting.

113. Srinivas, M. N. *Social change in modern India.* Berkeley: University of California Press. 1966, 194p.

The Rabindranath Tagore memorial lecture given in 1963.

114. Steward, Gulian H. *Theory of culture change.* Urbana. University of Illinois Press, 1955, 244p.

Gives the conceptual scheme for cross-cultural research, the key concept being multilinear evolution. The book discusses empirical studies showing the application of the concepts.

115. Tiryakian, Edward A. (Ed.) *Sociological theory, values, and sociocultural change.* New York: Free Press of Glencoe, 1963, 302p.

A collection of essays in honour of Sorokin, on sociological theory and change in systems, families etc. in the space age and the age of rapid industrialization.

116. Watson, Goodwin (Ed.) *Concepts for social change.* Washington, D. C.: National Training Laboratories, 1967, 88p.

Contains papers on the concepts of organizational development, resistance to change, collaborative action-inquiry and self-renewal system.

117. Watson, Goodwin (Ed.) *Change in school system.* Washington, D. C.: National Training Laboratories, 1967 (a).

Contains papers on properties of school systems, organizational development in school system, change-agent role and self-renewal school system.

118. Worchel, Philip & Donn, Byrn (Ed.) *Personality change.* New York: John Wiley & Sons, 1964, 672p.

The four sections of the book treat conceptual problems and assessment of personality variables, theoretical considerations of personality change, personality change in various groups, and the effects of unplanned factors.

119. Zollschan, George K. & Hirsch, Walter (Eds.) *Explorations in social change.* Boston: Houghton Mifflin, 1964, 832p.

A collection of 31 original contributions from three continents on social change.

Index

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